

BUSINESS WEEK

INDEX OF
PAGE 14

←
INDEX
YEAR
AGO



Women: An eager market in some alien worlds (page 34)

A MCGRAW-HILL PUBLICATION

DEC. 25, 1954

GENERAL LIBRARY
ACQUISITIONS DIV
UNIT OF GA
ATLANTA GA
88 81 8



Did Gutenberg "invent" the miniature radio?

YOU naturally think of Gutenberg as the father of modern printing. His art has now led to a new advance in electronic communications.

Seeking smaller radio equipment, electronic engineers replace complex hand-wiring with *printed* electrical circuits. Manufacture has been further simplified by printing the

circuit on a material made with Shell Chemical's Epon® resins.

An inert base, such as glass fiber cloth, is impregnated with Epon resin, creating a "laminate" to which the metal-printed circuit is bonded without additional adhesive. That's because Epon resin is itself an adhesive and clings to the printed circuit even in a bath of molten solder.

Shell Chemical Corporation

Chemical Partner of Industry and Agriculture

NEW YORK



Putting Young America on wheels

How
KELLER Air Tools
Solved Another
Problem



Do your youngsters belong to the pell-mell set that skates along the sidewalk—or waltzes on the neighborhood rink? If not, perhaps they will join when they find shiny new roller skates under the tree this Christmas.

If roller skates were on your Santa Claus list, you may have been amazed at how well they are made, and how low they are in price.

From years of experience in putting young America on wheels, a leading roller skate manufacturer has learned the value of Keller Air Tools in streamlining production, reducing costs, and maintaining product quality.

The illustration above shows a worker assembling wheels to the skate trucks with a Keller Nut Setter—one of a number of Keller Air Tools used con-

stantly in this particular plant to make assembly faster, easier, and less fatiguing.

Are you using Keller Tools in your "buttoning-up" operations? Keller engineers, with long experience in streamlining production and assembly processes, will gladly help you in the proper application of screw drivers, nut setters, riveters, grinders, drills, hoists, and other Keller Air Tools.

KELLER TOOL COMPANY

1201 FULTON STREET

GRAND HAVEN, MICHIGAN



Air Tools engineered to industry

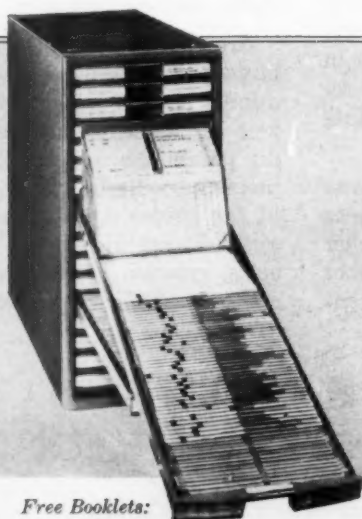
Remington Rand

Mr. Executive:
are you
concerned
with
control

- ☐ *Production?*
- ☐ *Personnel?*
- ☐ *Sales?*
- ☐ *Inventory?*

You, too, can profit through the finer yet firmer executive control Kardex Visible gives. Kardex integrates and concentrates related facts for quick reference — it signals major items of information in convenient, bar chart form. You can see...compare...analyze...execute...all in seconds.

Why not apply Kardex Visible Control to your record-keeping problems, whether those listed above or others specific to your business? For any of its cost-saving applications, Kardex provides quick, effective Visible Control, "locked-in" with exclusive Kardlok Forms and Signals. Write Remington Rand Inc., Room 2234, 315 Fourth Avenue, New York 10, N. Y.



Free Booklets:

Production—X1268; Personnel—CR906; Sales—KD524; Inventory—KD375

B U S I N E S S W E E K

EDITOR & PUBLISHER Elliott V. Bell

MANAGING EDITOR Kenneth Kramer

ASSISTANT MANAGING EDITOR Robert B. Colborn

ASSOCIATE MANAGING EDITORS John L. Cobbs, Peter French, Eugene Miller

DEPARTMENTS

Business Outlook: Clark R. Pace, *Editor*; Robert H. Persons, Jr.
Commodities: Gertrude Charloff, *Editor*
Finance: William McKee Gillingham, *Editor*; Paul D. Gesner, David B. Carlson, Jr.
Foreign: Howard Whidden, *Editor*; Paul R. Miller, Jr.
Industrial Production: Charles M. Garvey, *Editor*; David C. Allison
Labor: Merlyn S. Pitzele, *Editor*; Edward T. Townsend
Management: Richard L. Waddell, *Editor*; Richard M. Wight
Marketing: Carl Rieser, *Editor*; Cora Carter, John C. L. Donaldson
Personal Business: Guy Shipley, Jr., *Editor*; Ann Masse
Research: George J. Gray, Jr., *Editor*
Illustration: Harry Jensen, Kate McSweeney, *Editors*; Robert Isear (*Pictures-Photography*), Bernard R. Clorman, Herbert F. Kravitz, Jomary Mosley, Arthur Richter
Regions: Frank J. Fogarty
Statistics: Elsa Denno
The Trend: M. J. Rossant
Library: Dorothy Roantree, *Librarian*; Emily Cherry, Ruth Shalvoy
Assistant to the Editor & Publisher: John F. Harshorne

NEWS EDITORS

T. B. Crane (*Senior News Editor*), Robert F. Deed, D. A. Drennen, Maxwell D. Gunther, Lawrence H. Odell, Doris I. White

EDITORIAL ASSISTANTS

Mary T. Beckerle, Edward J. Burgess, Jr., Mary M. Burgess, Jean Drummond, Barbara Kleban, Alice Marks, Jacqueline M. Pitcher

ECONOMICS STAFF

Dexter M. Keezer, *Director*; William H. Chartener, Peter J. Davies, Richard Everett, Douglas Greenwald, Margaret Matulis, Dora K. Merris, Robert P. Ulin

DOMESTIC NEWS SERVICE

Atlanta Bureau: Wm. H. Kearns, *Manager*
Boston Bureau: Paul Finney, *Manager*
Chicago Bureau: James M. Sutherland, *Manager*; Mary B. Stephenson, Dorothy Miller
Cleveland Bureau: Robert E. Cochran, *Manager*; Wm. N. Troy
Detroit Bureau: William Kroger, *Manager*; Susan Tower
Houston Bureau: Normand DuBeau, *Manager*; Mary Schiflett
Los Angeles Bureau: Thomas M. Sel, *Manager*; Lorraine M. Lemmon
Philadelphia Bureau: W. B. Whitchard, Jr., *Manager*; Esther A. Schultz
Pittsburgh Bureau: Richard N. Larkin, *Manager*
San Francisco Bureau: Richard Lamb, *Manager*; Joanne O'Brien
Toronto Bureau: Werner Renberg, *Manager*
Washington Bureau: George B. Bryant, Jr., *Manager*; Glen Bayless, Alan E. Adams, Carter Field, Jay Flocken, Boyd France, William Gilmour, Sam Justice, Donald O. Loomis, Gladys Montgomery, Arthur L. Moore, E. William Olcott, Morton A. Reichel, Caroline Robertson, John T. Skelly, Vincent Smith.
Correspondents: Akron, Albany, Austin, Baltimore, Birmingham, Buffalo, Charleston, Charlotte, Cincinnati, Columbus, Dallas, Denver, Des Moines, Duluth, Fort Worth, Greensboro, Hartford, Jacksonville, Kansas City, Knoxville, Little Rock, Louisville, Memphis, Miami, Milwaukee, Minneapolis, Nashville, New Orleans, Oklahoma City, Omaha, Orono, Phoenix, Portland (Ore.), Providence, Richmond, Rochester, Salt Lake City, San Antonio, San Diego, Seattle, St. Louis, Syracuse, Toledo, Wilmington, Worcester, Honolulu. **Correspondent Relations:** Dorothea Schmidt

FOREIGN NEWS SERVICE

Editor: Joseph K. Van Denburg, Jr.
Bonn: Gerald W. Schroder
London: Edward W. S. Hull
Manila: Herbert Leopold
Correspondents: Amsterdam, Athens, Bangkok, Beirut, Belgrade, Bogota, Bombay, Brussels, Buenos Aires, Cairo, Caracas, Ciudad Trujillo, Copenhagen, Djakarta, Durban, Geneva, Guatemala City, Havana, Helsinki, Istanbul, Johannesburg, Karachi, La Paz, Lima, Madrid, Melbourne, Oslo, Ottawa, Panama City, Quito, Reykjavik, Rome, Salzburg, San Juan, San Salvador, Santiago, Stockholm, Sydney, Tehran, Tel Aviv, Wellington, Winnipeg.
Mexico City: John Wilhelm
Paris: John O. Coppock
Sao Paulo: Lionel J. Holmes
Tokyo: Dan Kurzman

ADVERTISING DIRECTOR Herman C. Sturm
 ADVERTISING MANAGER John M. Holden
 BUSINESS MANAGER Richard E. McGraw



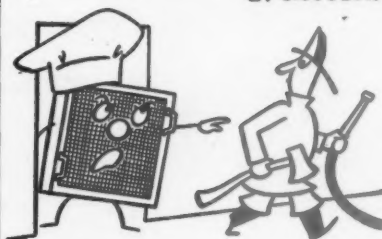
BUSINESS WEEK • DEC. 25 • NUMBER 1321

(with which are combined The Analyst and the Magazine of Business) • Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder, • Publication Office, 99-125 North Broadway, Albany, N. Y. • Editorial, Executive and Advertising, Donald C. McGraw, President; Willard Chevalier, Executive Vice-President; Joseph A. Gerardi, Vice-President and Treasurer; John A. Cooke, Secretary; Paul Montgomery, Executive Vice-President, Publications Division; Ralph B. Smith, Vice-President and Editorial Director; Nelson Bond, Vice-President and Director of Advertising. Subscriptions: Address correspondence regarding subscriptions to J. E. Blackburn, Jr., Vice-

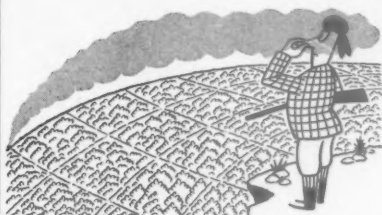
President and Director of Circulation, Business Week, 99-125 N. Broadway, Albany 1, N. Y., or 330 West 42nd St., New York 36. Allow one month for change of address. Subscriptions to Business Week are solicited only from management-men in business and industry. Position and company connection must be indicated on subscription orders. Single copies 25c. Subscription rates—United States and possessions \$9.00 a year; \$12.00 for three years. Canada \$7.00 a year; \$14.00 for three years. Other Western Hemisphere countries and the Philippines, \$15 a year; \$30.00 for three years • All other countries \$25 a year; \$50.00 for three years • Entered as second class matter Dec. 4, 1936, at the Post Office at Albany, N. Y. under Act of Mar. 3, 1879 • Printed in U.S.A. Copyright 1954 by McGraw-Hill Publishing Co., Inc. — All Rights Reserved.

AIR-MAZING FACTS

BY O.SOGLOW



KEEPS FIREMEN OUT OF KITCHENS! Air-Maze Greastop filters snatch dirt and grease droplets out of the air, help to prevent fire hazards in commercial kitchen exhaust ducts. It's one of hundreds of filter types designed by Air-Maze—the filter engineers.



SMELLS FOREST FIRE 1500 MILES AWAY! In August 1910, trappers in western Canada saw the sky darken and smelled the smoke of a forest fire 1500 miles away! Source of this smoke was the great Idaho fire which burned 3 million acres of woodland.



SOUND IDEA FOR DIESELS. Noisy diesel air intakes cause employee fatigue and annoy neighbors. But Air-Maze filter-silencers hush the racket while they clean the air.

IF YOU BUILD OR USE engines, compressors, air-conditioning and ventilating equipment, or any device using air or liquids—the chances are there is an Air-Maze filter engineered to serve you better. Representatives in all principal cities. For condensed product catalog, write Air-Maze Corporation, Dept. C, 25000 Miles Rd., Cleveland 28, Ohio.

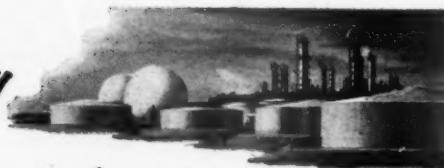
AIR-MAZE

The Filter Engineers

AIR FILTERS
 SILENCERS
 SPARK ARRESTERS

LIQUID FILTERS
 OIL SEPARATORS
 GREASE FILTERS

From the oil refinery



*to America's endless
transportation system*



Johns-Manville Insulations contribute to our nation's progress

**By helping industry make better fuel and faster,
more comfortable equipment at lower cost**

Johns-Manville Insulations play an important role in our everyday lives. By conserving heat and cold in the refinery, they cut costs and improve performance in the production of gasoline and other petroleum products. Used in producing metals, they contribute to the economical manufacture of cars, busses, trucks, ships, planes and trains. And, in insulating such equipment against summer heat and winter cold they add materially to our travel comfort.

Johns-Manville Insulations are scientifically engineered to the job. Experienced J-M Insulation Engineers serve industry by specifying the right Johns-Manville materials for every temperature from 400F below zero to 3000F above.

Experienced J-M Insulation Contractors apply these materials according to proved J-M methods. This combination of skilled men and scientific insulation saves American industry more than a billion dollars in fuel every year. For more information write Johns-Manville, Box 60, New York 16, N. Y. In Canada, 199 Bay Street, Toronto 1, Ontario. *T. M. Reg. U. S. Pat. Off.

**For 96 years industry has looked to Johns-Manville
to solve its insulation problems**



Johns-Manville
INSULATIONS
SERVE YOU—BY SERVING INDUSTRY

READERS REPORT

Baffled by Sniffles

Dear Sir:

Referring to your article, The Sniffles Yield an Inch [BW—Nov. 27'54,p112], how do you reconcile the U. S. Public Health Service's figure of over 500-million colds in the U. S. each year with the Common Cold Foundation's report that the cold villain hits everybody on the average of twice a year?

Using a U. S. population base of 160-million, two colds a year for all our population would make 320-million reasons for aspirin, tissues, cough medicine, etc. If U. S. P. H. S.'s figure is correct, then the CCF should have more ammunition in its fight for funds as the common cold's incidence is easily 50% greater than originally advertised.

DOMINICK R. BARBARO

FLUSHING, N. Y.

• We should have made clearer the fact that the two colds per year figure applies only to workers. Among children and nonworkers, the incidence of colds is higher—eight colds a year for some nonworkers is not unusual, and this brings the total up to 500-million.

A Place in Politics

Dear Sir:

Congratulations on your editorial, Business and Politics [BW—Nov.20'54,p196].

Too many writers in the business world have approached this subject with articles that should have been entitled Business vs. Politics.

Agreeing that "the successful businessman does not always make the successful politician," it does not necessarily mean that there are no successful businessmen who have demonstrated their inherent ability to "resolve and reconcile human forces."

Legislative problems in California are not much different from those in other states—with industry paying the bills and hoping for an economically sound administration of the billions involved.

The several hundred sponsors of the Southland Committee, as represented by the current 1954 advisory group, have found over the years that if a candidate once elected has to be coerced by some sort of lobbying pressure into making a wise economic decision, he is the wrong man for the job, regardless of party affiliation or political standing.

Cooper-Bessemer-powered Army towboat demonstrates extreme maneuverability on Ohio River near Dravo Corporation, Neville Island yard, where she was built.

Another example
of
efficient power
at lower cost



Look...no rudders!

COOPER-BESSEMER POWER GETS BEHIND A "NEW TWIST"

NEW TWIST is right! The above towboat is shown turning within her own length—a remarkable feat as any work boat operator will testify. She's the new Cooper-Bessemer-powered U. S. Army LTI-2194—first towboat designed and built with revolutionary vertical axis propellers—no rudders!

What does this mean? It means previously unheard of maneuverability. It means greatly improved control and speedier handling of heavily laden barges in restricted waters and fast flowing rivers—a matter of no small importance to the Transportation Corps of The U. S. Army.

The Cooper-Bessemer engines on the LTI-2194, like the vessel herself, are the last word in modern design. They are unusually compact, highly effi-

cient *V-type* diesels with greater-than-ever power to space ratios.

If your plans call for heavy-duty power, for *any* marine, mobile or stationary service, check with Cooper-Bessemer. Find out about the *newest* things being done by one of America's *oldest* engine builders.

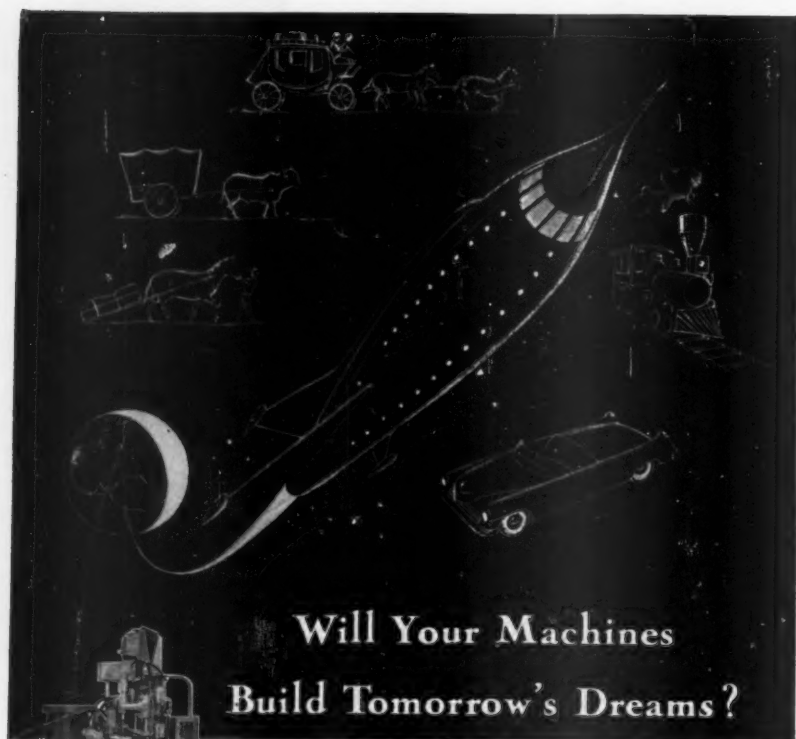
Mount Vernon, Ohio

COOPER-BESSEMER

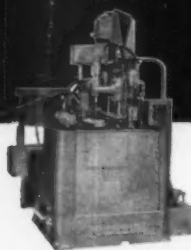
Grove City, Pa.

New York • Chicago • Washington • San Francisco • Los Angeles •
San Diego • Houston • Dallas • Odessa • Tampa • Groggton •
Seattle • Tulsa • St Louis • Gloucester • New Orleans • Shreveport
Cooper-Bessemer of Canada Ltd., Halifax, N. S., Edmonton, Alberta

DIESELS • GAS ENGINES • GAS-DIESELS • ENGINE-DRIVEN AND MOTOR-DRIVEN COMPRESSORS • HIGH PRESSURE LIQUID PUMPS



Will Your Machines Build Tomorrow's Dreams?



LEES-BRADNER
MODEL 7-A AUTOMATION
SPINDLE HOBBER

*I*t takes a lot of doing just to keep up with the world these days. A lot of thinking and planning ahead.

That's because progress is *always* just beginning... we're forever on the threshold of new advancements that mold the future for all of us.

Modern machines are the tools that transmit the planners' dreams into tangible products. And it takes new, modern machines to fabricate these products with maximum efficiency at minimum cost.

Lees-Bradner, as a leading manufacturer of hobbing and threading machines, perpetually looks ahead to the needs of tomorrow. Extra capacity is built into each model hobbing and threading machine so the buyer can be assured his future production requirements can be handled.

A talk with your Lees-Bradner representative... or a letter of inquiry to the company... will give you the whole exciting story of these machines that are actually "ahead of their time!"



Southland Committeemen look at a legislative candidate in much the same manner they would analyze the capabilities of a possible treasurer or chairman of their own board.

Such nonpartisan efforts can be... successful in merging Business and Politics.

WALLACE E. PROPST
LOS ANGELES, CALIF.

Top of the Market

Dear Sir:

The answers to the question of why the market continues to rise are numerous.

As I see it, the Democrats lived by the motto of "Tax, tax, tax" and "Spend, spend, spend," and business liked the Spend, spend, spend, even though they did not care for the Tax, tax, tax. So the market rose. When Eisenhower was elected, he promised to cut the tax, but even though he also cut the spend, business liked the cut of the tax, so the market rose. Now with the Democrats controlling Congress, and Eisenhower still President, we have a dual situation all to the good. The President will see that the cut in tax which business likes will continue, and the Democrats will see that the Spend, spend, spend, which business loves is reinstituted.

However, the market must naturally go the way of all flesh. What I would like to know... is when that time will arrive, so that we may not be caught long nor prematurely go short.

JOSEPH O. SMIGEL, M.D.
EXECUTIVE MEDICAL DIRECTOR
THE PINEHAVEN SANITARIUM
PINEWALD, N. J.

• We, too, would like to know.

Out of Place

Dear Sir:

A short item about Tide Water Associated Oil Co. [BW—Dec. 4 '54, p54], placed our nine-month capital expenditures at \$4.1-million.

Actually... our nine-month outlay was more than \$41-million, up some 28% over the same period of 1953....

We... are proud and enthusiastic about our expansion program for this and the coming years. Accordingly, I thought you would want to have your attention called to that wandering decimal point.

FERO WILLIAMS
SENIOR VICE-PRESIDENT
TIDE WATER ASSOCIATED OIL CO.
SAN FRANCISCO, CALIF.



Elevators are on duty electronically day and night



HOTEL ABRAHAM LINCOLN
Reading, Pa.

The 300-room HOTEL ABRAHAM LINCOLN, which renders outstanding service to the traveling public and large conventions, has modernized two attendant-operated elevators to completely automatic Otis AUTOTRONIC elevating.

HOTEL ABRAHAM LINCOLN is one of more than 175 new and modernized hotels, office buildings, hospitals, banks, and department stores that have given AUTOTRONIC elevating an overwhelming vote of confidence—by buying it!

Managing Director: LeVan Bollinger
Manager: Francis H. Mills

In hotels, elevator service must always be ready to meet the extra demands of late social affairs, civic luncheons, conventions and checkout periods.

Ordinarily, this means the added expense of extra elevator operators and overtime.

With completely automatic AUTOTRONIC elevating, every car with its "automatic elevator operator" is always on duty electronically. Every "operator" is fully trained, with instantaneous electronic reflexes that never tire or slow down. These operators are never late or absent. They never complain about overtime duty. They draw no pay—ever!

With AUTOTRONIC elevating every change in the traffic pattern is detected immediately by the automatic supervisory system—and the number of cars in use and their group operation is changed to give today's finest service.

Otis operatorless elevators can save up to \$14,000 a car, each year in hotels.

Call any of our 268 offices for details.

Otis Elevator Company, 260 11th Ave., New York 1, N. Y.



COMPLETELY AUTOMATIC
AUTOTRONIC®
ELEVATING

Why You Need Professional Services at Every Step

to make your Eyecare Program Produce!

In your plant, you would hesitate before placing a lathe operator at a drawing board or a draftsman at a lathe. In this age of specialization, each to the job he does best.

However in industrial prescription eyecare, there have been occasions where ALL the necessary services have not been performed by the only people competent to perform them — the specialists in eyecare. In these instances, industry has not received the maximum benefits of a visual correction program which can only come when the safety prescription glasses are verified, correctly positioned and comfortably fitted by a professional specialist. These *professional* re-

sponsibilities are as necessary as the earlier steps of *professional* exami-



nation, refraction and prescription.

Your Safety Director knows the value of adequate professional services in eyecare and the high quality

standards maintained by AO† in the manufacture of lenses and



frames. To make your Eyecare Programs produce — look for these services and the AO† trademark — always!

*Safety is our business — and the business of Industry. Examination, refraction, verification and the fitting of prescription glasses are the responsibilities of the professions.

American Optical

†T.M. Reg. by American Optical Company



SAFETY PRODUCTS DIVISION

SOUTHBRIDGE, MASSACHUSETTS • BRANCHES IN PRINCIPAL CITIES

BUSINESS OUTLOOK

BUSINESS WEEK

DEC. 25, 1954



JOBS WANTED: 20-million of them over the next 20 years.

It's up to American industry to supply those jobs. Otherwise, the economy will trail population growth, living standards will suffer.

Creating the 20-million new jobs falls to the lot of top management—and this is problem enough. Personnel experts also will face tasks with ever-changing aspects, all of which call for advanced planning.

Sharp shifts in age groups, most particularly, must be studied by those who will do the hiring and handle labor relations.

There are some 62-million job holders today. That is 53% of those considered employable (14 years of age and up, not in the armed forces or institutionalized).

By 1975, there will be 155-million employables. Use today's ratio: if 53% of them work, that's 82-million job holders.

Over the last 20 years—1935 through 1954—jobs have gone up about 48% while the working population has increased only 20%.

Jobs could rise faster than population, of course, because we were emerging from a woeful depression into an unprecedented boom.

It will be different in the next 20 years. Working population will go up by one-third and jobs have to increase the same amount. And this increase must fit right on the top of the boom.

There's no depression slack of idle plants and markets to fill.

Behind the need for these 20-million new jobs, needless to say, is the baby crop of the war and postwar years.

Right now, this bumper crop of youngsters is having far-reaching effects on the economy. Milk and pabulum aside, they are behind the boom (1) in three-bedroom houses, and (2) in spending for schools.

Over the next 10 years—1955 to 1965—their pressure will be on the high schools and colleges.

Young people will begin to swell the labor force even before 1965—those who don't go through high school and college.

But, starting that year, they'll come on the labor market in a flood. Take for the highlight just the 18-year-old males:

In 1955, only about 1.1-million boys will reach that milestone. The average for 1960-64 will be 1.4-million. Then, in 1965, there will be 2-million youths turning 18.

Prior to this infusion of young blood, you'll be relying increasingly on workers over 35 years of age.

In the next decade, there will be an 8-million increase in the population

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
DEC. 25, 1954

group between the ages of 35 and 64. Now totaling 55-million, they will number 63-million in 1965.

By contrast, the pool in the 20-34 age bracket will rise only slightly in the same period (from 35-million to 35.8-million).

Here's the problem you, as an employer, can see in the age shifts:

Skills will be fairly easy to buy in the coming decade when the big gains will be among those over 35. But, before 1965, you had better get set to train the wealth of young, strong newcomers.

You have to drop back in time 20 and 30 years to recognize what's new in today's labor force. Here are the factors:

- Those who will swell the ranks of the over-35s in the upcoming decade were mostly born before the midtwenties—when births still were rising consistently. Thus each year sees a larger number turning 35.
- Those in the 20-34 pool, on the other hand, will be increasingly the babies of the thirties. From 1926 to 1932, the number of births actually declined; from then through 1938, there was only a leveling off. Thus the new 18-year-olds will hardly more than offset those turning 35.

In today's job market, about 30% of the workers are between 20 and 34 years old; 58% are between 35 and 64; the remaining 12% are teenagers and those over 65.

The ratios won't change much over the next 10 years.

But look at 1975: Youngsters and oldsters will keep their 12% of the jobs. But those between 20 and 34 will make up 37% of all workers while those between 35 and 64 will account for only 51%.

Here's another factor that can increase the number of young workers even beyond all these projections:

If the military takes a smaller proportion of men over the next 20 years than in 1954, add 2-million to 4-million onto the new job seekers—all of them in that 20-34 age bracket.

You can count on odd jobs absorbing about 3-million out of those who will be added to the labor force in the next 20 years. But you must figure the other 17-million as full-time breadwinners.

There's one variable, by the way, that isn't taken into account anywhere in the foregoing: women. And, as anyone who has followed their inclinations knows, this may be a mistake.

We would have a labor-market pinch now if it weren't for women.

One-third more women are working in the 25-44 age group now than before World War II (while child-bearing has cut the number under 25).

Altogether, 28% of women over 14 worked before the war, 32% now. Whether the ratio will rise between now and 1975 depends on a lot of things—among them, whether their husbands can get jobs.



Now every office can have one!

WANT TO get rid of the nuisance and delay in licking and sticking old-fashioned adhesive stamps?...Wet nursing stamps in a tin box?...Stamp losses and borrowing?...Running out of denominations you need?...Trips to the postoffice to buy stamps?... Then you want a postage meter!

Now the smallest office can afford modern metered mail—with the low cost DM, desk-model postage meter.

The DM *prints* the exact postage needed for any class of mail, directly on the envelope; and a dated postmark that helps your mail go through the postoffice faster. Prints your own small ad at the same time, if you like.

Anybody can use a DM, save time and postage. Just dial the amount of postage wanted, press the lever, and

your letter is stamped. It has a moistener for sealing envelopes, and also handles parcel post.

The DM is set by the postoffice for as much postage as you want to buy. And your postage in the meter is safe from loss and misuse.

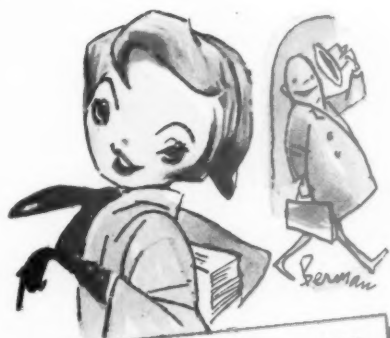
THERE'S a Pitney-Bowes postage meter, electric or hand-operated, for every office, large or small. Ask the nearest PB office to show you—or send coupon for free booklet.

FREE: Handy chart of Postal Rates with parcel post map and zone finder.



PITNEY-BOWES
Postage Meter

Made by the world's leading manufacturer of mailing machines...offices in 94 cities in the U. S. and Canada.



PITNEY-BOWES, Inc.
1451 Pacific Street, Stamford, Conn.

- ☐ Send free Postal Rate Chart
☐ Send booklet on DM Postage Meter

Name.....
Address.....



The fabulous Tournament of Roses Parade on New Year's Day in Pasadena

On hand . . . the bank that knows California

With resources of over \$8 billion, Bank of America is the world's largest bank. Its shares are held by more than 200,000 stockholders.

★

Bank of America has main offices in the two Reserve cities of California, San Francisco and Los Angeles. Overseas branches: London, Manila, Tokyo, Yokohama, Kobe, Osaka, Bangkok, Guam. Representatives: New York, Mexico City, Milan, New Delhi, Paris and Zurich. Correspondents throughout the world. Bank of America (International), New York, a wholly owned subsidiary; overseas branch, Duesseldorf.

Bank of America is "on hand" to Californians everywhere. From the high, winding roads of Sierra mining towns to the broad boulevards of metropolitan centers, this is the *one bank* that's always near-by *anywhere* in California. With 546 branches in 330 communities Bank of America serves the entire state.

Perhaps this unique statewide

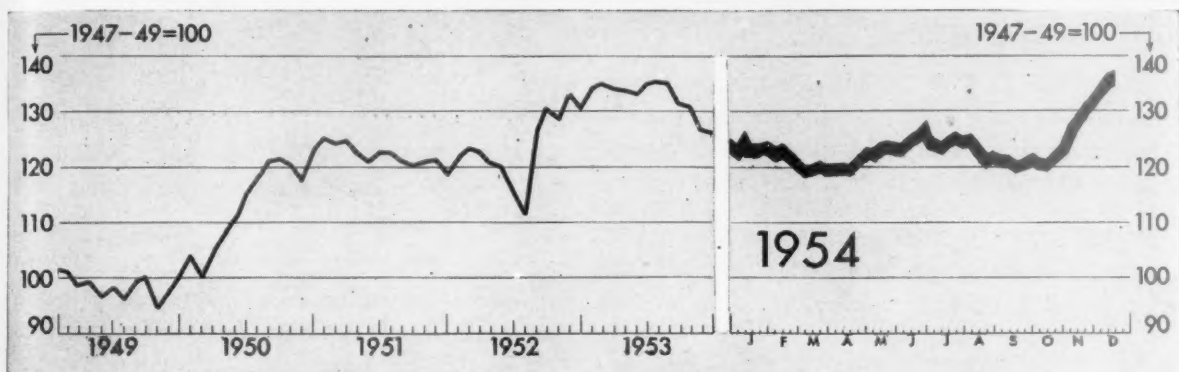
service can assist you. Bank of America can provide on-the-spot marketing data . . . supply local credit information . . . help to locate new plant or store sites . . . obtain land costs. To inquire, write Bank of America, 300 Montgomery Street, San Francisco, or 650 South Spring Street, Los Angeles. Attention: Corporation and Bank Relations Department.

...Get to know the bank that knows California

Bank of America
NATIONAL TRUST AND SAVINGS ASSOCIATION

COPYRIGHT 1954, BANK OF AMERICA MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

FIGURES OF THE WEEK



Business Week Index (above)

\$ Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
*137.0	†136.6	131.3	127.5	91.6

PRODUCTION

Steel ingot production (thousands of tons).....	1,956	†1,950	1,915	1,444	1,281
Production of automobiles and trucks.....	180,087	†176,075	160,097	132,093	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av., in thousands).....	\$50,319	\$47,262	\$52,808	\$59,031	\$17,083
Electric power output (millions of kilowatt-hours).....	9,909	9,846	9,317	8,896	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,375	6,341	6,265	6,248	4,751
Bituminous coal production (daily average, thousands of tons).....	1,463	1,417	1,511	1,434	1,745
Paperboard production (tons).....	252,701	258,595	257,148	241,648	167,269

TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars).....	67	68	70	69	82
Carloadings: raw materials (daily av., thousands of cars).....	42	42	48	40	53
Department store sales (change from same week of preceding year).....	+3%	+1%	-2%	-3%	+30%
Business failures (Dun and Bradstreet, number).....	208	223	208	210	22

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	408.1	405.5	410.9	409.9	311.9
Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100).....	88.8	88.9	89.1	83.0	††73.2
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100).....	90.2	90.9	92.0	95.8	††75.4
Print cloth (spot and nearby, yd.).....	18.6¢	18.6¢	18.7¢	19.0¢	17.5¢
Finished steel, index (U. S. BLS, 1947-49 = 100).....	144.7	144.7	144.7	141.4	††76.4
Scrap steel composite (Iron Age, ton).....	\$32.83	\$32.00	\$32.83	\$30.00	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.).....	30.00¢	30.00¢	30.00¢	29.985¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.48	\$2.46	\$2.47	\$2.34	\$1.97
Cotton, daily price (middling, ten designated markets, lb.).....	34.15¢	34.03¢	33.75¢	32.55¢	30.56¢
Wool tops (Boston, lb.).....	\$2.08	\$2.15	\$2.13	\$2.12	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's).....	279.5	274.4	268.0	197.5	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.45%	3.45%	3.45%	3.73%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	11-1½%	11-1½%	11-1½%	2½%	1-1½%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	57,926	56,583	55,682	56,085	††45,820
Total loans and investments, reporting member banks.....	86,470	85,583	85,745	80,344	††71,916
Commercial and agricultural loans, reporting member banks.....	22,359	22,255	22,107	23,130	††19,299
U. S. gov't guaranteed obligations held, reporting member banks.....	37,174	36,752	37,677	33,036	††49,879
Total federal reserve credit outstanding.....	26,487	25,858	25,933	26,921	23,883

MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average
New orders for machinery, except electrical (McGraw-Hill, 1950 = 100).....Nov.....	116	90	88	N.A.
Cost of Living (U. S. BLS, 1947-49 = 100).....Nov.....	114.6	114.5	115.0	83.4

*Preliminary, week ended Dec. 18, 1954.
† Revised.

†† Estimate.
N. A. Not Available.

§ Date for "Latest Week" on each series on request.

in BUSINESS this WEEK . . .

GENERAL BUSINESS:

PLANNING FOR A 50-YEAR STANDOFF. Eisenhower has a new policy on armed strength that will mean big changes for U. S. business; sharp ups and downs in military buying will level off. . . . p. 17

FORD SLASHES BONUSES IT USED TO LURE BRASS. Apparently it isn't beating the bushes for managerial talent any more. . . . p. 18

MORE CAUTION ON CREDIT. The Federal Reserve's new policy will make it a little harder and more expensive to get loans. . . . p. 19

U. S. SCORES PROPAGANDA TRIUMPH AT THAI FAIR. In Bangkok, Thailand's capital, successful U. S. exhibit gave Communists stiff competition. p. 20

SYNTHETIC RUBBER. U. S. has already signed up

more buyers for the plants than Congress ordered p. 22

NEW RULES WILL CUT U. S. DAM BUILDING. Local interests seeking multi-purpose dams will have to foot more of the bill. p. 22

LOOKING INTO THE NEW YEAR. The National Industrial Conference Board has again gathered economic experts to predict the future. p. 23

BUICK'S HARDTOP IS ROOMIER NOW. GM adds a rear door and gives its 1955 line the first body style change in the industry since 1949. p. 24

NEW ANTITRUST . . . policy shows up in Eastman Kodak settlement; it saves time by negotiating terms before filing suit. p. 24

Business Briefs p. 26

BUSINESS ABROAD:

GUIDING FOREIGN POLICY. The advisory team in the White House has a new member—Special Assistant Nelson Rockefeller . . . p. 54

TONING DOWN "BUY AMERICAN." Pres. Eisenhower requests all agencies slash price preference given to U. S. bidders under the act. . . . p. 54

Business Abroad Briefs. p. 57

FINANCE:

ANOTHER BIG JUMP IN 1954 in total debt. Here's the way some important components contributed to the increase p. 66

Finance Briefs p. 67

LABOR:

NO ANTITRUST DRIVE ON UNIONS. Organized labor has won a reprieve in the policy report on trust busting. But it may be restrained by other legal curbs. p. 58

UNION CONCESSION FAILS TO HALT RICE-STIX SALE. Despite reduced labor costs, clothing maker was forced to sell out to competitor. p. 60

FACING A SPLIT. With Albert Beeson leaving, NLRB worked fast while it still had his decisive fifth vote. p. 62

Labor Briefs p. 63

	Page
Business Outlook	9
Washington Outlook	29
International Outlook	51
The Trend	80
Figures of the Week	13
Personal Business	71
Readers Report	4

The Pictures—Ansul Chemical Co.—79; R. Bunnag—20, 21; General Motors Corp.—24; International News Photos—54; Bob Isear—19; Herb Kratovil—49; National Industrial Conference Board—23; Don Ornitz—Cover, 34, 35.

MANAGEMENT:

1954 WAS THE PAYOFF YEAR. The bull market has made stock option plans worth a lot. p. 44

DOW CORNING'S NEW CHIEFS. Affiliate company gets its own management to give more leeway for market development p. 48

MARKETING:

WOMEN CUSTOMERS—THEY'RE IN EVERY MARKET NOW. Garagemen turn instructors to teach them the anatomy of the automobile. p. 34

JUSTICE HITS PRICE-FIX ANEW. Government charges Philco Corp.'s distributor contracts eliminate competition p. 43

THE MARKETS:

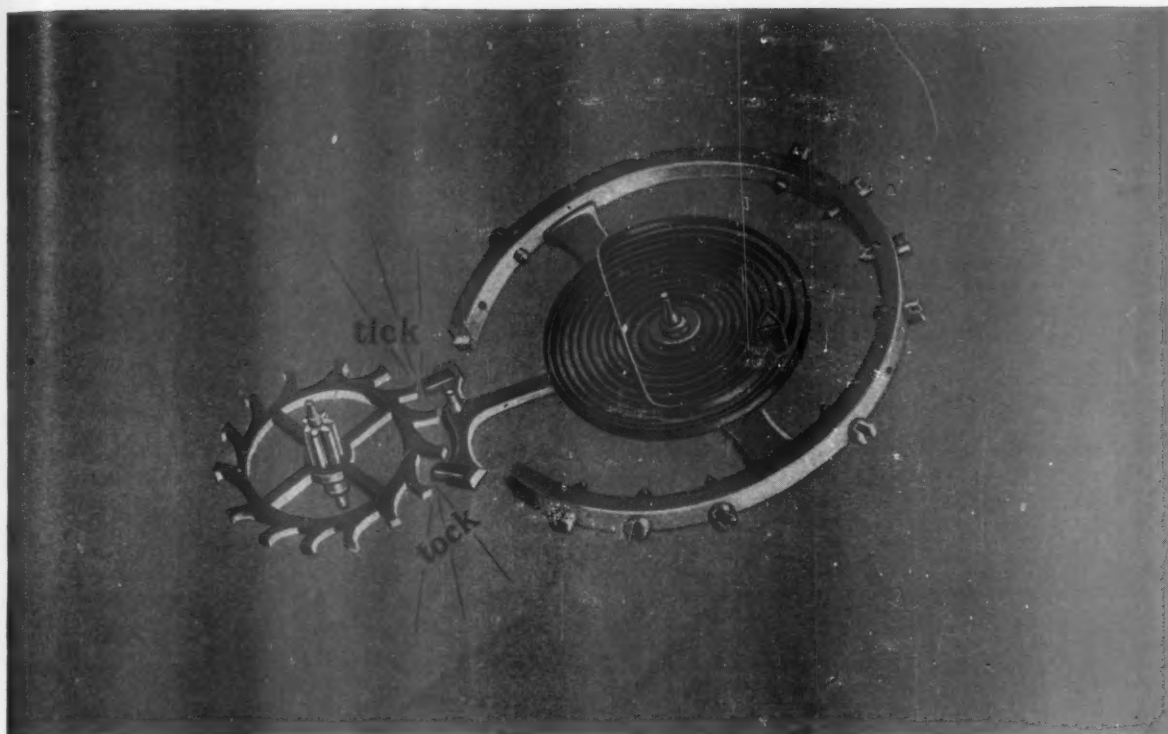
THIS YEAR'S BIG WINNERS. Christmas greetings from Wall Street's bulls—these are the ones that made them happy. p. 68

PRODUCTION:

ARE THEY PILING UP CLAIMS? Noisy machines can cause serious losses to industry. p. 74

Production Briefs. p. 78

NEW PRODUCTS p. 79



Accuracy assured by this

Hairspring

Spinning the balance wheel of a watch back and forth five-times-per-second... flexing 300 times every minute, hour after hour, day after day the year 'round... this hairspring is a miracle of metallurgy. Its unvaried elasticity makes possible the utmost in timepiece accuracy.

And the secret of this performance?

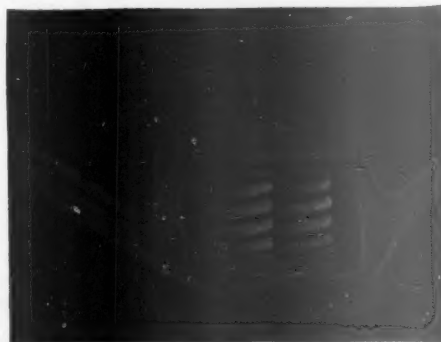
A nickel alloy with an almost magical characteristic, a constant modulus of elasticity over a broad range of temperature. Yet, it combines excellent strength, toughness and corrosion resistance with its constant elasticity.

Such combinations of useful properties may be obtained in nickel-containing alloys, to improve the efficiency and lengthen the life of all sorts of machinery and equipment parts.

As an alloying element, nickel imparts to other metals strength, hardness, toughness, ductility, and resistance to fatigue, heat and corrosion.

Yours for the asking... draw on Inco's fund of useful information on the properties, treatment, fabrication and performance of alloys containing nickel.

Write for "List A" of available publications.



Giant Springs have Nickel in them, too... because nickel helps provide good elastic strength, superior surface qualities and impact resistance in large coil and leaf springs. It also helps extend fatigue life. Large springs of nickel alloy steel, such as those shown above, are widely used in railroad and other heavy-duty applications.



THE INTERNATIONAL NICKEL COMPANY, INC. 67 Wall Street New York 5, N.Y.

the Queen is at
the Market
buying Bread and Honey...



the King is at the office
working for the money!

...and since this Queen is a typical COMPANION reader—she is buying *more* bread and honey than the average shopper. For the COMPANION reader has a *larger than average* family. Her mind is on her home—and her home is her castle!

Buying bread and honey is just one part of the job of running the castle.

It's a big job. *Her* job. And COMPANION editors know it. That's why they give her what she wants in service and entertainment. The COMPANION is her friend and her guide—she believes and trusts what she reads in it.

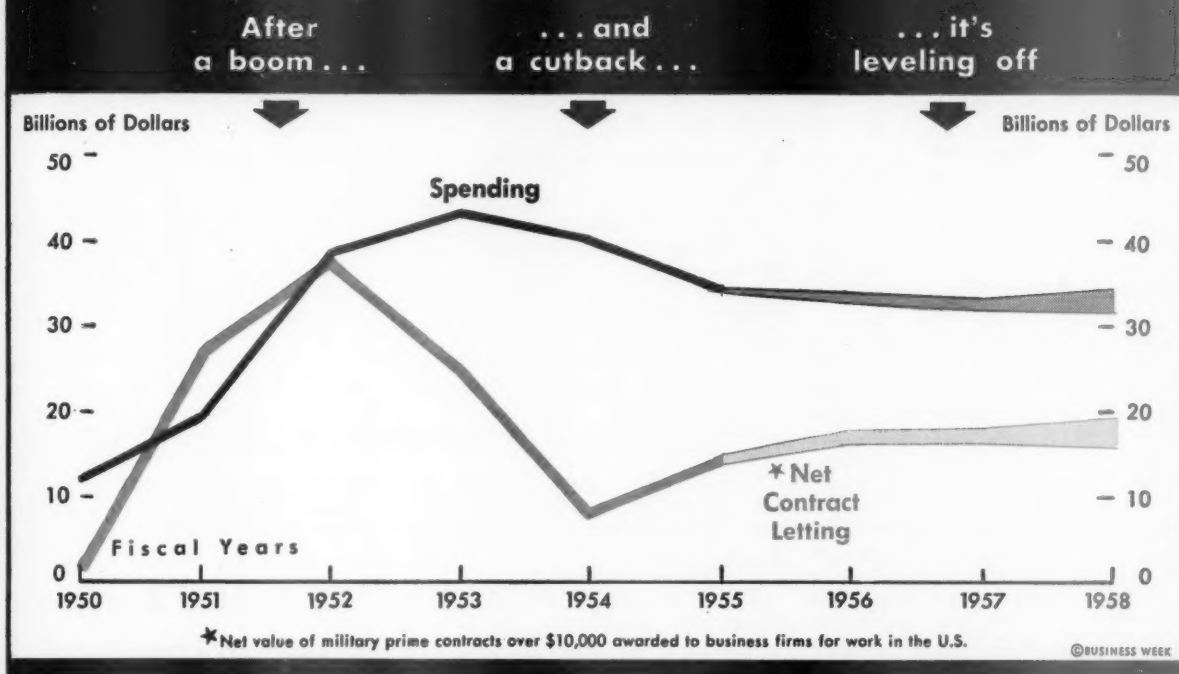
So be sure your advertising is in the right place, at the right time—in the COMPANION every month!

the Companion
caters to the Queen
in her Castle!



The Crowell-Collier Publishing Company, 640 Fifth Avenue, New York 19, N. Y.
— Publishers of Woman's Home Companion, Collier's, The American Magazine.

Defense Business



Planning for a 50-Year Standoff

The Eisenhower Administration's "new look" policy on military power, which it brought to Washington two years ago, came to an end this week. In its place is a new concept of armed strength—the 50-Year Look.

The change means:

- Cuts in military spending are about over (chart).

- A level-off period of spending is here sooner than anyone had expected, but at a higher figure than Republican budget-balancers had hoped for.

- More expensive weapons will be coming.

- The Army will shrink a bit, but this will be offset by an expanded reserve force if Congress accepts Eisenhower's ideas.

- **Steadier Business**—All this means big changes for U. S. business. The sharp ups and downs that have characterized military buying policy since World War II are over.

The aircraft industry, for example—one of the country's biggest employers—will continue to sell close to 90% of its output to the military for a long time.

Naval shipbuilding will expand—not only for the five new super-carriers now contemplated but also for vessels of all types, to replace holdovers from World War II.

Demand for electronics gear will continue to rise.

Many other military demands on industry will drop—food, clothing, and other personnel-maintenance costs; combat-type vehicles; public works.

Others will stay about where they are now—production equipment and facilities, for example, and research.

I. New Posture

Behind the sudden leveling-off of military spending at around \$33-billion

a year is a basic change in our military posture.

It has been disclosed piecemeal over the past two weeks. Eisenhower will spell out details in his State of the Union and budget messages to Congress next month, but here is the broad outline of what the Administration has decided:

- The chance of a world war in the foreseeable future remains slight. That is the background of the President's press conference comment that we must prepare a military establishment for a 50-year pull, if necessary.

- The chance of a brush-fire war of the Korea type—though not eliminated—is declining as the world moves into a generally more settled period in international politics.

- The way to keep both these trends moving in the direction of peace is to keep spending at a relatively high level, and also to reshuffle our military

strength to meet the new world situation.

II. New Product Mix

This calls for a new product mix along the following lines:

Long-range bombers: The ability to deliver hydrogen bombs to the heart of Russia from bases overseas is still the core of our military thinking. But it no longer occupies such a dominating place in the total picture. Other considerations have gained importance.

Super-carriers. The Navy is expected to ask Congress for money to build its fifth. The first one, the Forrestal, was launched a couple of weeks ago; the second and third have been started, and a contract for the fourth will be awarded soon. Here's how they fit into the new concept: The Administration believes their existence will be a warning to the Communist world not to start small wars. And if there's fighting that calls for our intervention, the super-carriers will deliver counter-blows of unprecedented strength.

Continental defense. It's on the upgrade. Early-warning devices will be expanded across the rim of the Arctic. Interceptor planes and guided missiles will be stressed.

This means that talk of utter devastation in the first days of a hydrogen-bomb war is being outdated. The historic balance of defense against new weapons of attack can be restored, in the opinion of those who back a stronger protective screen. The strategic purpose is to guard U.S. productive power in the first 30 to 60 days of onslaught, so we can go on to win all-out war if it comes.

Smaller Army. Eisenhower this week ordered a 403,000 slash in military manpower. The draft will be cut in half. The armed forces will be reduced from 3.2-million to 2.8-million by summer of 1956. The Army will take most of the cut; the Navy and the Marine Corps will get smaller ones; the Air Force will be slightly expanded.

This means a return to the manpower concept held by the Administration before the Indo-China flare-up. It foreshadows a 20% reduction in spending for personnel-maintenance items, spread over the next 18 months.

Bigger reserve. The Pentagon wants a first-line reserve of 3-million men, with 2-million in a secondary group. It has Eisenhower's personal backing. The plan is to give young men of military age a choice of service plans ranging from 6 months in service and 9½ years in reserve to 2 years in service and 6 years in reserve.

More stockpiling. Buying, already expanded this year, will be stepped up further. This decision stems logically from the new emphasis on defending

our industrial base at home. The factories that survive an initial assault will need a quick supply of critical materials. A better defense means more factories surviving—and a bigger draw on the stockpile.

Broader production base. Defense Secy. Charles E. Wilson's new defense buying policy (BW-Dec.18'54,p25) is part of the increased stress on continental defense. It seeks to avoid centralizing output—to keep it spread out so as to offer a poorer target for bomber attacks. Alternative sources of supply will be kept open for weapons and components, even if this means buying from relatively high-cost producers. This is an important switch for Wilson.

III. New Dollar Impact

The chart (page 17) shows the broad outlines of new defense spending—cuts in spending coming to an end, new contracts rising slightly from the current fiscal year.

The first inkling of what lies ahead came from Wilson, when he said he would ask for \$5-billion more in appropriations for fiscal 1956, beginning next July 1. He added that defense spending from now on would range between \$33-billion and \$37-billion—somewhat higher than the range expected by other top officials. The Truman Administration used to put the level-off range at somewhere between \$35-billion and \$40-billion.

• **What the Books Show**—The impact on industry varies widely by type of product.

Aircraft. Deliveries of military planes will decline through 1957. In 1953, they averaged around 960 per month. They dipped to just under 900 per month this year, and will go down to around 820 a month in 1955. There are no good estimates for the following two years, but there is likely to be a small increase beginning in 1958.

Dollar payments to the aircraft industry will increase despite the decline in deliveries. That's because planes will be more expensive. The Air Force is hoping to get \$4-billion of the \$5-billion rise in appropriations to be requested by Wilson.

For a time it looked as though transport plane orders would be cut back while orders for bombers, fighters, and interceptors would increase. Now it looks as if even transports will be expanded. Air Force Secy. Harold E. Talbott is sponsoring an expansion of worldwide freight deliveries by air. He argues that the time an engine is out of service at a base abroad for overhaul back in the States can be cut from the present 270 days to 100 days if the engine is flown to and from this country, instead of moving by water and

land transportation. This line of reasoning will be used to plug for more transport planes with a pay load of 50 tons or more (BW-Dec.11'54,p56).

Combat-type vehicles. Due for further cutting. Orders came to \$3.2-billion two years ago at the height of the Korean buildup; last fiscal year, they dropped to \$1.4-billion; they were down to \$600-million this year and will be even less in fiscal 1956.

Ammunition. Same trend. Last year, \$2.9-billion; this year, \$1.4-billion; next year, somewhat less.

Military public works. There may be a slight rise for fiscal 1956, from \$1.3-billion in the current year to around \$1.5-million. But this will be followed by a trend downward—to perhaps \$1-billion in fiscal 1957, and still less for fiscal 1958.

Guided missiles. On the way up. They moved from \$300-million last fiscal year to \$500-million this year, and will go substantially higher.

Electronics gear. Will go up, in line with new continental defense thinking.

Production facilities. Expansion would fit into the industrial mobilization base picture, but so far there is no sign of more money for plant and equipment. This year, appropriations are down from \$1.7-billion two years ago. Present plans call for another decline to \$400-million next year.

Research. Will stay around the \$1.3-billion of recent years.

Ford Slashes Bonuses It Used to Lure Brass

Ford Motor Co. marked the end of one type of expansion this week by slashing the lavish yearend bonuses it has used to attract managerial talent. In some cases, "supplemental compensation" was cut 50%.

Apparently Ford now believes it has sufficient managerial talent. But the reduction of the bonuses could have another significant meaning. It could indicate that Ford Motor Co. stock will soon become available to the public. Some of the people affected by the bonus cut feel that the move was dictated by the fact that outside stockholders would not look kindly on management bonuses of the size Ford had been paying.

Ford insiders, however, point out that in the past year the ranks of those earning over \$9,000 a year increased, with the result that the bonus pie was cut into more pieces. But this doesn't explain why some bonuses weren't shaved at all.

Another factor may have entered the bonus cut. With sharper competition in the industry, Ford's generous bonuses have become a considerable cost item.



WILLIAM McC. MARTIN and his Federal Reserve System colleagues have switched to...

More Caution on Credit

By quietly dropping an adjective from their official vocabulary, the nation's money managers have signaled a change in monetary policy. For well over a year, the Federal Reserve Board has used the term "active ease" to describe its policy of keeping the banking system supplied with almost unlimited reserves of credit.

Last week the word "active" was no longer in fashion. And its discreet omission is highly significant for the financial community and for business in general.

• **Passive Ease**—The Federal Reserve will put its new policy into effect mainly by refusing to take active steps to increase the supply of credit, rather than by any positive restrictive measures. Its operations will stay on the highly technical level where only the professional money men understand the signals and watch for them.

But the effect will be visible: Borrowers will find it a little harder to get loans, and they'll pay higher interest rates for what they borrow.

• **A Mission Accomplished**—In setting a new course, the Federal Reserve is reflecting the view that the current revival in business is not a false alarm but a real recovery. Thus, it feels the economy no longer needs unlimited credit in order to continue recovery. In fact, the Fed's action makes clear its fear that a continuation of active ease might encourage inflation.

This does not mean that the Fed will

be applying brakes, as it did when the Eisenhower Administration first took office. It does mean that the Fed won't keep pressing down on the accelerator, as it has since the reversal of the hard money policy in May, 1953.

The objective of the new course is to maintain enough flow of credit to meet demand without creating sloppiness. This entails a maximum of flexibility on the part of the Open Market Committee, that—through its buying and selling of government securities,—will be primarily responsible for carrying out the new policy.

• **Three in Two**—This third shift in monetary policy in two years is also an answer to many critics of the Federal Reserve. The Fed has often been accused of being slow in reacting to economic changes and then taking inadequate steps. This may have been a valid criticism in the past, but it does not fit the activities of the present Reserve System.

Chmn. William Martin has described the new change as "a shift in emphasis" that could be scrapped on short notice. And in admitting that "getting a perfect garment for the future may require several fittings," he indicated that no firm decision has been reached on how far the shift should go.

• **Margins**—Before the signal that a shift was taking place, there were rumors that the Fed would raise the

margin requirements on the purchase of listed securities from the present 50%. Such guessing was to be expected, of course, considering the rapid advance in stock prices and big increase in stock market activity since the election (BW—Dec. 18 '54, p27).

As a matter of fact, the Federal Reserve undoubtedly considered raising margin requirements. It is probable, though, that the authorities decided the market boom chiefly reflects a return of business confidence, rather than dangerous speculation.

If recovery is in progress, as the Fed itself indicates, prices of most issues are not out of line with what might be expected; and present dividend yields are still above the levels reached during historical periods of speculation.

• **No Wet Blanket**—If the Federal Reserve had raised margin requirements, it would have been a sign of alarm about the current level of stock prices. This might have snuffed out the optimism now prevailing in all sectors of the economy (page 23).

• **Mortgage Debt**—Anyhow, brokers' loans had shown a relatively modest growth for a year earlier, and the Federal Reserve was much more concerned over the swelling of mortgage debt. This debt now totals something like \$110-billion, with home mortgages in particular accounting for about \$70-billion of the total.

Fast expansion of mortgage debt is the Fed's target in cutting down the banks' excess reserves. The money managers are believed to be aiming at reducing reserves from the present range of \$400-million to \$750-million to a new level between \$200-million and \$400-million. This should make banks a little less eager to maintain the present rate of mortgage lending.

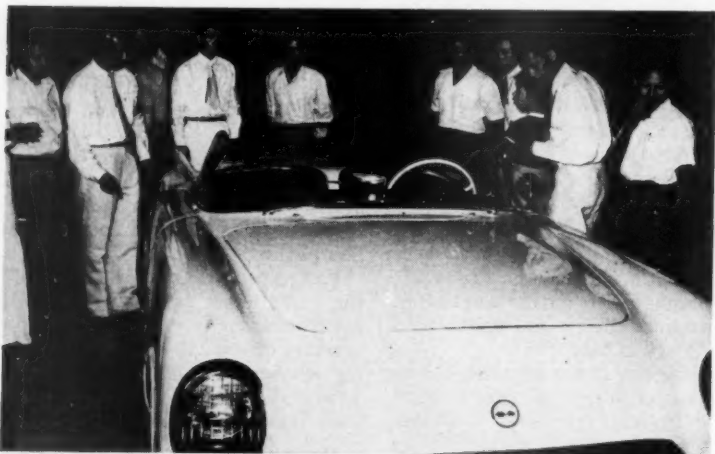
• **Subtle Shift**—Federal Reserve policy has shifted so subtly that only the monetary experts can see signs of it. One of these signs is the Open Market Committee's inaction in either buying or selling government securities during the first half of December.

Coming at the height of the Christmas season, when demands for credit are strong, this lack of action served as eloquently as any positive gesture in making money tight. It resulted in a rise of interest rates on 90-day Treasury bills to the highest point since early last January, and in a decline in prices of government bonds.

If pressed, a firming of money rates—and an increase in bond yields could be a more effective damper on the stock market than any juggling of margin requirements, the experts say. But they don't think the Fed will push its policy further, in the near future, than is required merely to soak up some of the excess reserves.



UNITED STATES' theme, "The Fruits of Freedom," is emphasized by the Bank of America, which opened a branch in Bangkok at the end of the war.



AMERICAN sports cars such as the Chevrolet Corvette and other typical Western "specialties" attract the curiosity of the city's younger set.



BRITAIN displays a few items, such as soap, but its products were much less prominent than in prewar years.



JAPAN, which benefits from a \$65-million barter agreement with Thailand, concentrates on a display of its textile industry.

U.S. Scores P

On the other side of the world last week, the U.S. stole a propaganda march on the Russians in the kingdom of Thailand. And it was on ground where the Communists have been pushing us around for years: an international fair.

Since the Thai are currently short on dollars, the U. S. exhibit was mostly a see-what-we've-got affair. But Washington hopes that it is the forerunner of many successes in a new \$5-million program to give the Communists stiff competition in 18 international fairs next year (BW—Nov. 13 '54, p148).



PAVILIONS at Thailand's Constitution Fair in Bangkok rise in the shadow of old Buddhist temples.

Propaganda Triumph at Thai Fair

Last week's do was the annual Constitution Fair, held in Bangkok, capital of Thailand (formerly called Siam). The fair celebrates the end of absolute monarchy in Thailand in 1932, and the beginning of parliamentary government.

• **Exotic Background**—To an American, almost any fair in Bangkok is bound to be a success, for the country is the West's dream of the East. Golden-roofed temples rise in a city crisscrossed by canals. When Thailand's young Swiss-educated king leaves his palace—as he did last week to open

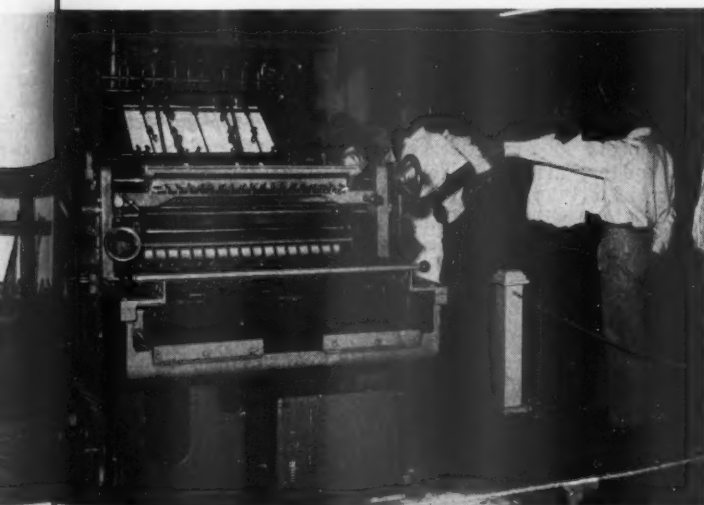
the fair—his brown-skinned, smiling subjects line the streets. There is no abject poverty as in India and China, no hatred of foreigners, since the country managed to preserve its independence during 19th Century European imperialism.

Even Thailand's 3½-million Chinese who control most of the country's commerce (BW—Dec. 4 '54, p144), seem mellowed by Thailand's sun and prosperity. Fundamentally, the country has what few other Asiatic nations have: more than enough food to feed its population. And it was spared the rav-

ages of World War II when it capitulated early to the Japanese.

• **U.S. Stake**—There couldn't have been a better testing ground for the new U.S. program. The fair itself, held in Bangkok's Lumbini Park, is the country's biggest social event of the year. Originated as a purely political celebration, it now gives sellers a chance to show their goods.

This year's fair cost exhibitors about \$3-million, a big outlay considering how much construction work \$1 will buy in Bangkok. The U.S. spent some \$400,000 on a pavilion that, with the



WEST GERMANY, though not represented officially, shows a new German printing press through its Bangkok distributors.



LAOS, which has strong racial ties with Thailand, staged a fashion show to set off its world-famous silk brocades.

help of 140 American manufacturers, demonstrated "The Fruits of Freedom," and showed everything from machine tools and tractors to medicine and sporting goods. This was backed up by the Cinerama, shown in a 2,000-seat outdoor auditorium. Cinerama had been a smash hit earlier this year at a fair in Damascus, Syria, when local U.S. officials had to improvise hastily to meet Russian propaganda.

• **Counterattack**—Behind the U.S. exhibit was a serious bid to counter the main theme of Russian propaganda in underdeveloped countries: that U.S. industrial development is tied completely to building a war machine. The Russians plumped for this theme at last year's fair, when they presented a big pavilion topped by a Red star. This year they announced they would come again, armed with a Moscow circus and the Bolshoi Theater ballet. But difficulties arose over details and the Russians withdrew.

It was quite a defeat for the Russians, who don't get a tumble from the military junta that rules Thailand, but who—ever since they opened their embassy in the country just after World War II—have made a strong pitch for Thailand's masses.

• **Squeeze**—This pressure comes at a time when the country is undergoing an economic readjustment, mainly the result of the failure of its rice crop—the chief source of foreign exchange earnings—to move on the international market (BW—Nov. 6 '54, p142). During the past few weeks, the government has slapped severe import restrictions on so-called luxury products. Most of the articles exhibited at the fair fell under this category.

One big problem is that Thai law requires that the local currency, the baht, be backed by 60% gold. Most small Asian countries allow a monetary reserve fund of gold and foreign exchange. There's been some agitation to change the law, since Thailand's dollar earnings are still quite healthy from rubber and tin shipped to the U.S. But many Thai fear that, with the country's present shaky regime riddled with corruption, financial finagling might be hard to stop.

• **Prospects**—All this means, of course, that Western exporters aren't likely to find a ready market in Thailand during coming months. (Last year, the U.S. sold Thailand \$57-million, mostly in machinery, textiles, and chemicals.) Japan and Thailand recently renewed a \$65-million barter trade pact, Thai rice for Japanese manufactured goods. (Japan and Laos were the only other governments represented at the fair.) German imports were much in evidence at the fair. Britain, which used to be prewar Thailand's principal supplier, was less prominent than in former years.

Synthetic Rubber

Plants are "selling" briskly. U.S. has already signed up more buyers than Congress ordered.

The government's Rubber Producing Facilities Disposal Commission is still signing sales contracts covering the individual plants that make up its \$300-million-a-year synthetic rubber complex. It has already signed enough contracts to be able to submit a disposal package to Congress.

Midnight, Dec. 27, is the deadline for sale negotiation. At midweek, the commission had already signed up for 21 of the 27 available plants.

The contracts cover an annual capacity of 693,000 long tons of general purpose (GR-S) and butyl rubber; Congress had specified a 543,000 long ton minimum.

The probable price for the plants sold so far is about \$250-million. Contracts have been signed with:

- Shell Chemical Corp. for plants in Los Angeles making GR-S and their butadiene and styrene raw materials.

- Phillips Petroleum Co.'s chemical subsidiary for the two plants at Borger, Tex., making GR-S and butadiene. Phillips will buy styrene from Gulf-Coast chemical plants.

- Texas-U.S. Chemical Corp.—joint subsidiary of Texas Co. and U.S. Rubber—for one of two Copolymer Corp. plants at Port Neches, Tex., plus undivided half interest in the butadiene installation there.

- Goodrich-Gulf Chemicals, Inc. (owned by B. F. Goodrich Co. and Gulf Oil Corp.) for the other half of the Neches butadiene works and the second Copolymer facility there.

- Food Machinery & Chemical Corp., for the large butadiene plant at Houston.

- Petroleum Chemicals, Inc., joint subsidiary of Cities Service Co. and Continental Oil Co., for the butadiene works at Lake Charles, La.

- U. S. Rubber Co. for small latex and specialty GR-S rubber plant and a unit for making dodecyl mercaptan, a rubber-making chemical, both at Naugatuck, Conn.

- The Copolymer Corp., a consortium of seven smaller rubber users, for the butadiene and GR-S plants at Baton Rouge.

- Humble Oil & Refining Co., for the butyl rubber and butadiene plants at Baytown, Tex.

- Firestone Tire & Rubber Co., for the GR-S plants, at Lake Charles, La., and Akron. The Akron plant makes specialty rubbers.

- Koppers Co., for the alcohol butadiene plant at Kobuta, Pa.

- Goodyear Synthetic Rubber Corp., for two plants, a general purpose GR-S facility at Houston, Tex., and a specialty GR-S plant at Akron, Ohio.

First public announcement of contract prices will come Jan. 27, when the commission submits its report to Congress. Legislators will then have 60 days in which to object either to the package or to individual deals.

New Rules Will Cut U. S. Dam Building

It's going to be harder for the Army Engineers and Interior's Reclamation Bureau to get federal projects approved for multipurpose dams—power, flood control, irrigation, and navigation. The Budget Bureau, which has the last word on appropriations, is ready to put teeth in Pres. Eisenhower's theory that local interests should carry out such projects as far as possible.

Budget Bureau's Circular A-47, Revised, is being reviewed and is slated to go into effect early in the year. It tightens up the rules that were written by the Democrats in 1952 for federal participation in any rivers and harbors improvements, flood control and power projects, and water supply works.

• **Partnerships**—Under these rules, each project must be studied from the angle of who will benefit and by how much, and of who can pay for it and how much. The Washington line is that water resources development will be encouraged by a hands-off attitude in the federal government. Local interests will then know they must take the initiative, Administration people say.

The new rules say the federal government's role is to cooperate on developing water resources, not to take it over as the government's special province.

• **Criteria**—The new code sets up much stricter criteria for federal participation. Under the old rules, for example, a federal project could be approved if the value of benefits to be gained exceeded the sum of all costs. The new rules bring in other considerations: the extent to which state, local, and private interests will participate; the relation of each project to comprehensive development of a whole river basin; the project's economic benefits for the nation, region, and locality.

Moreover, estimates of annual benefits can no longer be based on simple projections of initial benefits. They must allow for possible decline in productive capacity of a project, for depreciation of plant, for possible obsolescence by technological advances.



FORUM: Annual full-dress survey of the future this year had such economists as Bradford Smith, NICB's Pres. John S. Sinclair, Thomas Holden, and Louis Paradiso . . .

Looking Into the New Year

Toward the end of every year, the National Industrial Conference Board rounds up a group of economic experts from business, government, and the universities. It introduces them to each other and unites them into a body called the Economic Forum. Then it bids them to make forecasts about the coming year.

The product of this year's 16-man forum is perhaps the most detailed and comprehensive forecast for 1955 yet to be made. But it is like most other surveys of 1955 (BW—Nov.13'54,p25) in this respect: It is optimistic—warily so, but optimistic nonetheless.

• **Two Forecasts**—Each of the 16 experts was asked to provide two predictions—one for his own particular sector of the economy, one for the economy as a whole. It turned out that the experts were generally more optimistic about their own individual areas than they were about the whole economy.

Their estimates of over-all activity indicated that 1955 will bring only a slight improvement over this year's levels. But their individual estimates for specific sectors, lumped together, predict that activity next year may well top the bumper year of 1953. The main conclusions from this more optimistic set of estimates:

• A 3% to 4% rise in gross national product, which would mean an average of about \$367-billion in 1955, compared to \$356-billion this year and \$365-billion in 1953.

• A 6% to 7% hike in the Federal

Reserve's industrial production index, which would bring production up to the 1953 level.

• A 1-million rise in employment and a drop in unemployment to an average of just under 3-million over the year.

These figures indicate that a good year lies ahead. None of the experts could foresee any major stimulus that would bring about a really sharp rise. At the same time, there was no mention of any factor making for a drastic contraction. This was apparent in every area of the economy.

• **Method**—NICB's concentration on specific sectors as a method of forecasting over-all activity sets its predictions apart from most others. In NICB's case, at least, this method has proved more accurate in the past than the Forum members' predictions of over-all activity.

Last year, for example (BW—Jan.2 '54,p39), the consensus of the Forum indicated a 5% to 7% drop in 1954's GNP and a 10% to 15% decline in production. This forecast was for a sharper drop than actually occurred. But the outlook arrived at by adding up the individual forecasts for specific sectors indicated the decline in GNP would be between 2% and 5%, which was right on the target.

• **Offsets**—This does not mean that the experts' appraisals of their own special fields were wholly accurate. In construction, for instance, and in steel production, last year's forecasts were pretty

wide of the mark. But the errors in these estimates tended to offset each other, so that when the estimates were lumped together, the resulting over-all figures were not affected.

Most of the economists invited to this year's Forum were repeat performers, so they were able to check their 1955 predictions against the ones they made in the past. In most cases, they did not mind confessing their mistakes, and they showed no inhibitions about getting out on a limb all over again.

One of those who was pessimistic last year and has now reversed himself is Thomas S. Holden (picture), vice-chairman of F. W. Dodge Corp., who covered the construction field. He pointed out that he had been "quite a way off" in thinking that the recession in other sectors during 1954 would mean a decline in construction. Instead, construction—sparked by private housing—has been one of the real plus factors (BW—Nov.27'54,p27). This led Holden to declare that "economists should probably pay more attention to the people."

• **No Surplus**—In giving his detailed predictions for next year Holden saw a slight drop in industrial building and moderate increases in commercial and residential construction. Housing starts might hit 1,250,000 next year, with builders concentrating on better-quality units.

Holden forecast a 5% increase in total physical volume of construction and a 6% rise in dollar volume next year. He called these figures "conservative," and noted that there was an enormous backlog in highways and school construction, while there was no actual surplus in any type of building.

• **Sales Up**—Another expert voicing moderate optimism was Columbia University's R. S. Alexander, who tackled retail trade. He had been over-bearish last year with a prediction of a 5% to 10% drop in retail sales. The actual 1954 drop, with the important Christmas sales not yet counted, has been 1%. Alexander sees a 5% increase in 1955, with sales of durable goods accounting for most of the rise.

This view was reinforced in part by George P. Hitchings, economic analyst for Ford Motor Co. He forecast a bigger increase in consumer spending on furniture and household appliances than on automobiles. He pointed out that auto sales have held up well in 1954, while sales of other durables have slumped badly. He figures that durables other than autos will be improving their share of the market in 1955.

In softgoods, Louis J. Paradiso of the Dept. of Commerce predicted no great change over 1954. But he did see a gradual rise in consumer outlays for services, following this year's trend.

• **Fingers Crossed**—A. D. H. Kaplan of

the Brookings Institution, who admitted that he had been pessimistic last year in forecasting disposable income, still has his fingers crossed. He felt that there was a big potential expansion in both consumer and business investment, but that "1955 is not yet the year of the big push."

One of the trouble spots is agriculture, according to Nathan N. Koffsky of the Dept. of Agriculture. He forecast a continued decline in farm income of about 3% to 5% in 1955, but little change in food costs.

Other sectors covered in the forum were these:

Government spending: Federal spending will continue to decline, although at a reduced rate, according to Solomon Fabricant of the National Bureau of Economic Research. He thought the Administration's tax and monetary policies helped cushion the decline this year, predicted that the government would step in again if trouble threatened.

Foreign trade: O. Glenn Saxon of Yale University predicted a "mild" expansion in sales of U.S. exports and a "moderate" increase in imports.

Steel production: Bradford B. Smith, economist for U.S. Steel Corp., fore-

cast a return to seasonal fluctuations in the industry, with production "not much more" than in 1954.

Money market: "No great change" in interest rates is foreseen by George B. Roberts, vice-president of New York's National City Bank.

Prices: Continuation of this year's competitive pressure will act as a lid on prices in 1955, according to Jules Backman of New York University. He noted that actual prices are a bit lower than reported prices, mainly because of discounts and other concessions.

Stock market: The upward trend in the stock market will continue, but it is likely to be punctuated by occasional declines. This was the measured forecast of Helen Slade, managing editor of the Analysts Journal.

Wages: John Dunlop of Harvard University predicted wage hikes of 5¢ to 8¢ an hour next year, including fringe benefits. He thought unemployment would be a major problem, but assumed that the Administration would not let it get out of hand.

Labor legislation: Richard P. Doherty, president of Television-Radio Management Corp., stood pat on his last year's prediction that there would be no modification of Taft-Hartley.

New Antitrust . . .

. . . policy shows up in Eastman settlement; it saves time by negotiating terms before filing suit.

The Eastman Kodak antitrust suit that broke this week was something different from the usual government action against alleged violators. Along with the complaint filed in Buffalo federal court, charging monopolistic practices in selling color film, the antitrusters also submitted a consent settlement signed by Eastman that disposes of all the government's charges.

The Republican antitrusters rate the handling of the case as a prime example of how a difficult antitrust situation can be corrected in a relatively short period of time without a court case that may take years.

• **Terms**—The settlement terms are about what you would expect. Eastman agrees to sell its color film without including processing, or in any way tying sale of its film to processing. Eastman also will grant licenses to use its patents on color film processing and equipment; supply technical data and experts to explain its commercial technology; and permit inspection of its plants by other color film processors. All fair trade agreements signed by Eastman on its color film are to be canceled.

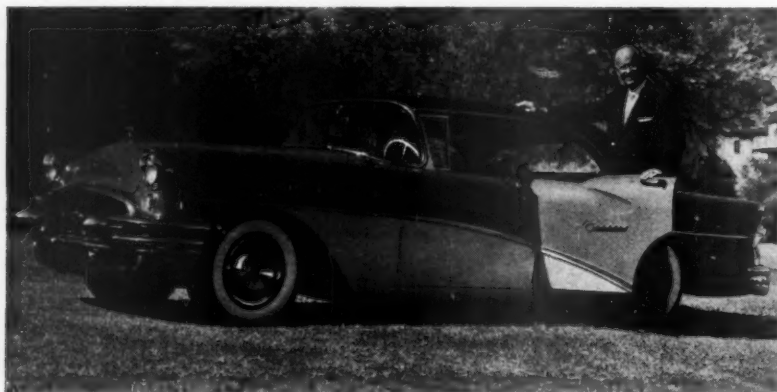
One unique provision, however, calls for divestment in seven years of those Eastman facilities which, at that time, represent more than 50% of U.S. capacity for processing Eastman color film. Eastman can avoid divestment if it shows that competing processors are then handling a substantial volume of Eastman film.

• **New Angle**—To businessmen in general, though, it's the handling of the case that is significant. Ever since Asst. Atty. Gen. Stanley N. Barnes took over the Antitrust Div., he has been experimenting with negotiation to settle cases before they are filed. So far, success has been limited.

The Eastman case fits Barnes's policy perfectly. Eastman was notified last July that the government had an antitrust suit ready to file, and was asked "would you like to talk it over?" Eastman did.

Eastman gains something real, besides savings in time and trial costs. By agreeing to a consent settlement—without trial—Eastman eliminates possible use of the government victory by competitors to bolster private treble-damage suits.

Barnes says consent settlements are the only way his staff can keep up with antitrust enforcement.



Buick's Hardtop Is Roomier Now

General Motors thinks it has come up with an answer to one of the biggest objections to the popular hardtop convertible—and in doing so, is giving its 1955 line the first new body style introduced by anyone in the auto industry since 1949. Oldsmobile as well as Buick will have new-style cars.

GM's answer to the hardtop's lack of roominess and the inaccessibility of the rear seat is simple: It is adding the rear door. The new four-door hardtops will be in production some time in the spring.

Buick first introduced the hardtop in a two-door model six years ago. Like the two-door affair, the new four-

door model eliminates the center pillars between the doors and has the lines of a convertible—though strictly speaking the hardtop isn't "convertible" but stays put.

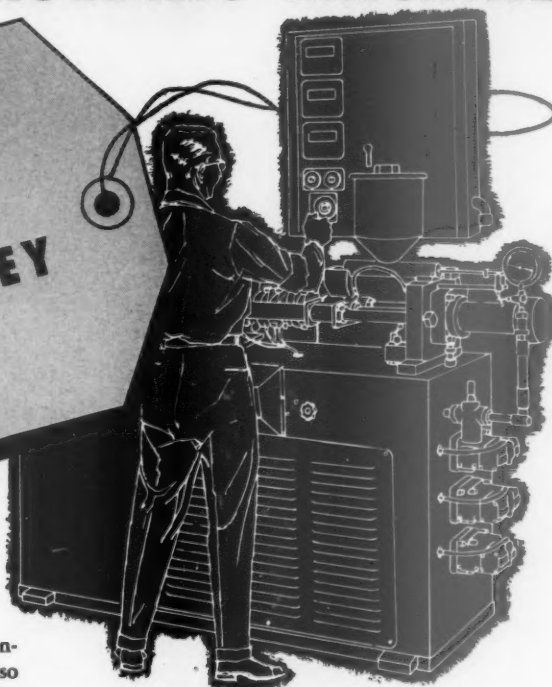
Introduction of the four-door hardtop probably heralds a faster decline for what is still the industry's best-seller—the four-door sedan. In the six years since the hardtop first appeared, the four-door sedan has slipped from better than 50% of the market down to 44%—while the hardtop has come up from nothing to about 16%. Biggest stumbling block in the way of the new style is price; a hardtop costs more than a conventional model.

MOSLO INJECTION MOLDING MACHINE

**FACTORY
EQUIPPED**



**with ALLEN-BRADLEY
Solenoid Control**



Modern production tools require the best in motor controls. That's why Allen-Bradley Solenoid Control is so often the preferred choice among machine tool and equipment manufacturers.

And here is the reason! The basic solenoid design—its one moving part—good for millions of trouble free operations—is the foundation upon which this superior line of controls is built. Consider, also, these other highly desirable features: double break, silver alloy contacts that require no maintenance; the best in overload relays; compact design; attractive enclosures with white interiors—all premium features you secure at no added cost. It makes good sense to specify Allen-Bradley control.

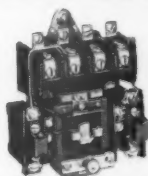
Let our customers tell you of their experience with Allen-Bradley controls. Our reputation for **QUALITY** control is based on the field experience obtained in many industries over the last 20 years.

Why not call in an Allen-Bradley field engineer—he will gladly help you with your control problems.

Allen-Bradley Co., 1332 S. Second St., Milwaukee 4, Wis.
In Canada—Allen-Bradley Canada Limited, Galt, Ont.



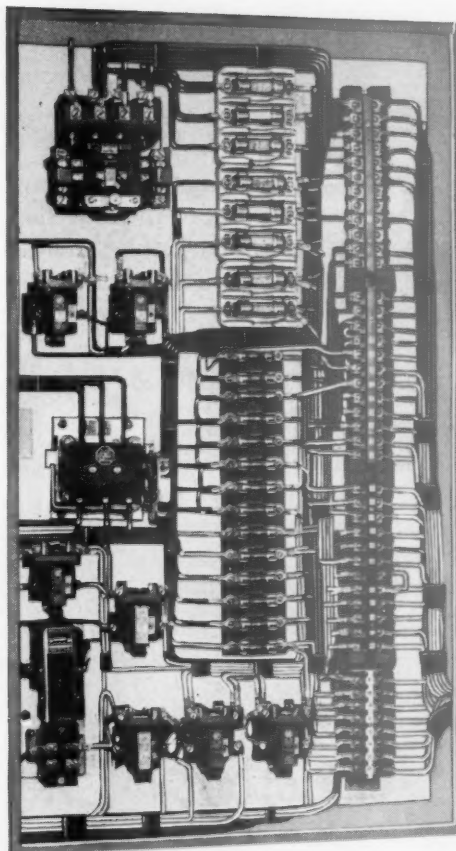
Bulletin 849
Pneumatic Timer



Bulletin 709
Size 1
Solenoid Starter

ALLEN-BRADLEY
SOLENOID MOTOR CONTROL

QUALITY



The controls which operate the
Moslo Molding Machine.

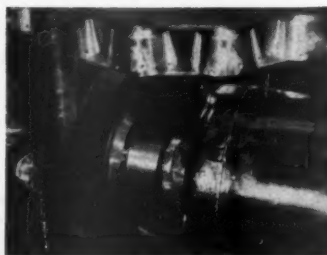


Faster production with power brushing

Here's how you can get it in your plant

AN Osborn Brushing Specialist knows where power brushing fits into the overall production picture. In making an Osborn Brushing Analysis, he studies all cleaning, finishing and burr removal operations. Then, he analyzes these operations and submits a written report that tells where power brushing could speed production or improve quality.

Such an analysis has resulted in big savings in many plants. It could do the same for you. There is no obligation for an OBA. Just call or write *The Osborn Manufacturing Company, Dept. A-50, 5401 Hamilton Ave., Cleveland 14, Ohio.*



4 Times Faster. Here, "push-button" brushing with Osborn Master's Wheels removes feather burrs at a rate of 1400 parts an hour. By former hand method, output was 360 per hour. An OBA can help speed your production, too.

Osborn Brushes



BRUSHING METHODS • POWER, PAINT AND MAINTENANCE BRUSHES
BRUSHING MACHINES • FOUNDRY MOLDING MACHINES

BUSINESS BRIEFS

The quest for natural gas is picking up in upstate New York. Transcontinental Gas Pipe Line has agreed to split the costs of exploration and drilling on the Ulster County holdings of Dome Gas & Oil Corp. Transco has an option to buy at least 25-million cu. ft. a day, to be piped to the New York City area.

Postwar capital spending by manufacturers hit a record \$115-billion, the Commerce Dept. says. No other comparable period has come close to the additions to working capital and production facilities in the stretch from 1946 to mid-1954. Yet manufacturers' net cash position actually went up \$2-billion in the postwar years.

A \$100-million countersuit has been filed by 23 of the railroads named last fall in a \$90-million damage suit brought by Riss & Co., Kansas City trucking company (BW-Sep.25'54, p34). The railroad action, filed in Washington (D. C.) federal court, accuses Riss of illegally hauling explosives, thus pinching off rail revenues. The original Riss suit accused 85 railroads and four associations of anti-trust violations.

Farm output for 1954 turned out to be the fifth highest on record, despite drought and controls. The Agriculture Dept. says the yield per acre was near the peak, offsetting the comparatively small acreage planted. Looking ahead the department sees the 1955 winter wheat crop hitting 679-million bu., a drop of 14% below last year.

Los Angeles lost a liberal newspaper when the Daily News folded this week. "Name, goodwill, circulation lists, and certain features" of the Daily News were bought by the Los Angeles Times-Mirror Co. C. D. McKinnon, publisher of the News, blamed the folding on annual losses ranging up to \$1-million.

A new steelmaking process using oxygen made its U.S. debut this week at the McLouth Steel Corp. in Detroit. The Brassert oxygen method (BW-Mar.6'54,p52) was tried in Austria; oxygen is forced down through the charge of iron at supersonic speed, somewhat in the way that air is blasted up through a Bessemer charge. The \$7-million McLouth installation has a daily capacity of 1,500 tons of steel.

FACTS ABOUT **Exide**[®]

INDUSTRIAL BATTERIES

TRAINS RUN WITH **GREATER SAFETY!**

WITH EXIDE-POWERED SIGNAL SYSTEMS, PASSENGERS AND FREIGHT TRAVEL FASTER AND SAFER. EXIDE BATTERIES PROVIDE A DEPENDABLE SOURCE OF POWER FOR SWITCHES, SIGNALS, CENTRALIZED TRAFFIC CONTROL BOARDS.

EXIDE-IRONCLAD POWER DRIVES THIS "BANANA TRAIN"!

THIS REVOLUTIONARY ELECTRIFIED HANDLING SYSTEM HAULS 30 TRAILERS OF BANANAS AROUND AN OVERHEAD RAIL... SAFELY AND AT LOWEST COST. SELF-CONTAINED POWER UNITS RELY ON 12-VOLT EXIDE-IRONCLADS...WRITE FOR DETAILS!

WORLD'S LARGEST **DOUBLE-ENDED FERRY** USES EXIDE-IRONCLAD BATTERIES!

THE STATE OF MICHIGAN'S HUGE "VACATIONLAND" HAULS TOURISTS IN SUMMER, BREAKS ICE IN WINTER. BELOW DECKS ARE EXIDE BATTERIES TO GUARANTEE POSITIVE OPERATION OF VITAL NAVIGATIONAL GEAR.

EXIDE INDUSTRIAL BATTERIES ARE BUILT FOR LONGER LIFE AND GREATER POWER. LET AN EXIDE SALES ENGINEER SHOW YOU HOW EXIDES CAN IMPROVE YOUR OPERATIONS AND CUT COSTS.

Exide INDUSTRIAL DIVISION, The Electric Storage Battery Company, Philadelphia 2, Pa.

g up
onti-
d to
drill-
gs of
has
llion
New

ufac-
the
com-
the
pro-
from
arers'
p \$2-

been
l last
suit
City
5'54,
d in
t, ac-
explo-
mues.
rail-
anti-

to be
espite
ulture
near
tively
ahead
winter
ou., a

paper
week.
, and
News
imes-
pub-
fold-
p to

oxy-
ck at
etroit.
BW-
ustria;
the
peed,
asted
The
has a
steel.



"I WANT THE DRUMSTICK, DADDY!"

Four months ago, Bob Jenks lay in a hospital bed . . . frightened and sick with worry. He had lost an arm in an accident at the plant. What, he wondered, lay ahead for him and his family?

He was surprised by what happened. He followed two thousand successful graduates through Liberty Mutual's Rehabilitation Center. After some drastic mental and physical adjustments, he learned to use and depend on his new "arm."

His machinist's skill has been transferred to welding, and he can do things with his electrode holder that the ordinary two-handed man cannot match. His pay is regular and ample.

It was a great day that first pay-

day. The whole family celebrated, and Bob proudly showed the carving skill of his new arm.

When a man like Jenks returns to work and normal living, everybody gains. First of all, he and his family gain. His employer gains when he keeps a loyal, experienced man. All compensa-

tion insurance costs are kept down.

Rehabilitation of men like Bob Jenks is part of Liberty Mutual's Humanics program. The complete program brings together all activities for preventing accidents and for reducing loss when accidents happen. All parts of the program — Industrial Engineering and Industrial Hygiene, Preventive Medicine, Rehabilitation and Claims Medical Service — are directed to cutting down loss in all forms.

This program can help you cut your compensation insurance costs. How . . . and how much . . . you can find out by calling or writing the Liberty Mutual office nearest you. Or write to us at 175 Berkeley Street, Boston 17, Massachusetts.



★ Better Compensation Insurance Protection at Lower Cost through HUMANICS ★

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
DEC. 25, 1954

A BUSINESS WEEK

SERVICE

Washington expects unemployment to rise next year. It's a blot on business prospects that is played down in rosy yearend statements by Washington officials. Politics explain the soft pedal. But the problem is well understood.

Here's the situation: Nobody in Washington questions the fall uptrend that has reversed the 1953-54 slide-off. Officials think it's plenty solid, and will carry through next midyear, at least.

The question is whether there's enough strength to provide the jobs for a growing labor force. Most answers are "no." That will give the Democrats a hot issue.

Take a look at these statistics, to help get the picture in focus.

The over-all economy will be up by an estimated \$10-billion to \$12-billion rise in the gross national product, (GNP)—total output of goods and services.

But that's short of political aims, as set forth in the federal law that makes full production and employment a national policy. The figuring is that it would take a \$20-billion rise just to break even—prevent a rise in unemployment; and \$30-billion to hit 1953's jobless level—a low, which politicians associate with a "good times economy."

Now, look ahead, and remember that it's not the number who are working that figures big in politics. It's the unemployed who get the attention.

Unemployment for February, 1955, is figured at 4.5-million. Present count is near 2.8-million. Last February it was 3.6-million. Thus, the estimate shows more than the usual seasonal rise for a tough winter month.

The estimated midyear number is 4-million plus. This year, it was 3.3-million, compared with the March high of 3.7-million. And you will recall how hot unemployment got as a campaign issue this past fall.

Democrats will whoop this up in Congress, in hearings and investigations calculated to embarrass Pres. Eisenhower—weaken him before 1956.

The Joint Economic Committee will be the stage. Hearings will start in January on Eisenhower's economic report. The big issue will be the level now forecast for business and what would be required for a "full economy." The big push will come from the Democrat's leftwing—from the members representing Northern and Eastern states, the New and Fair Dealers.

Business profits will be involved, if present plans are carried out. One scheme is to show how the auto makers made out this year. And then how their dealers fared—the big vs. little business issue. The point, of course, is that dealers, not makers, took the price cuts. Farmers are involved, too. Food prices haven't reflected the farm price decline, in full. The idea is to show how the consumer's food dollar was split. It's a farm appeal, but also aimed at courting the consumers.

The booming stock market is sure to come under the scrutiny of Congress. Senators and representatives are getting letters from investors and brokers suggesting a study to determine whether the market is at a dangerously high level and what, if anything, should be done by Washington. Sen. John Sparkman, (D., Ala.), plans to take the question up with financial

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
DEC. 25, 1954

leaders, such as Reserve Board Chmn: William McChesney Martin, during the January Congressional hearings on the President's economic report.

—•—
Congress won't kill state fair trade laws—the laws that permit manufacturers and retailers to set prices to consumers. The Administration is cold to the practice, and may propose that Congress call an end to it. But Congress won't, because of the "small business" appeal. But the trend is against fair trading. Discount houses and competition between makers of brand-name products are weakening the system.

—•—
Unions won't be put under the antitrust laws. This is one big fight that Labor Secy. James P. Mitchell will win against Commerce Secy. Sinclair Weeks (page 58).

—•—
The NLRB is stalemated—Departure of Republican member Albert Beeson from the National Labor Relations Board, leaves a 2-to-2 division between Eisenhower appointees and Democratic holdovers on the five-member board. Upshot will be that critical issues pending will be delayed until Eisenhower names a successor to Beeson.

—•—
Theophil Kammholz of Illinois probably will be confirmed by the Senate as the new NLRB general counsel. There's union opposition to him, on the ground that he's a management man. But Republicans figure they now can count enough Southern Democratic support to get him OK'd.

Joseph Campbell may be turned down by the Senate, even though he was given a recess appointment by Eisenhower to the Comptroller General post. The Senate is badly split on this appointment. Campbell is a former atomic energy commissioner, and Democrats will try to link him to the controversial Dixon-Yates power contract.

Judge John Marshall Harlan of New York seems sure of confirmation as a Supreme Court associate justice, after brief Senate hearings.

—•—
East-West trade policy is being restudied to bring it into line with Eisenhower's peaceful coexistence policy. The State Dept. thinks further easing of cold war tension will come first in trade and cultural fields, and it wants to be ready to meet any genuine Russian overtures.

You can see the drift in the serious consideration now being given Russia's new offer to take surplus U.S. butter. Earlier in the year, a Russian bid for butter was flatly rejected. But any formal shifting of East-West trade policy will come slowly. Washington will hold back any major concessions until the next Big Four meeting.

But trade possibilities are small, actually. The Soviet bloc has neither the goods nor the foreign exchange to finance any really big increase in their imports from the West.

—•—
The future dimensions of defense are now coming into better focus. The sharp decline in military spending is about over (page 17). Prospect is that the leveling out will come sooner than expected, at about \$33-billion. There will be more reliance on expensive weapons, less reliance on the number of men in uniform. On the production side, there's a new shift back to the broad-base concept. You get the picture in a series of recent moves, which were tied in with Eisenhower's reference to the needs of the next 50-years.

Continued copyrighted under the general copyright on the Dec. 25, 1954, issue—Business Week, 330 W. 42nd St., New York, N. Y.

powerfully mixed payload



PHOTO COURTESY T. L. SMITH COMPANY, MILWAUKEE, WISCONSIN

CHRYSLER POWER PARTNERS *help contractors break records, save on equipment while doing so*

This year promises to be a record year in highway construction. From coast to coast States are busy building super highways, planning others. Construction equipment was never busier, top-performing equipment never more important.

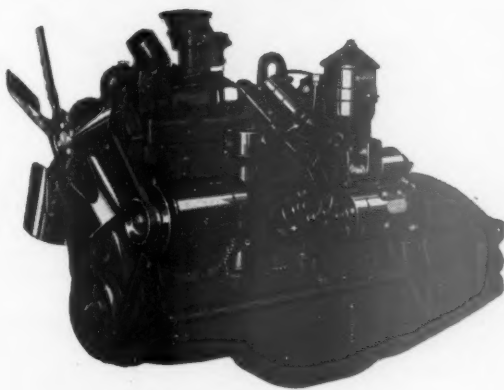
Here's a T. L. Smith 5½-yard Deluxe Mixer pouring concrete for a pier on a Los Angeles expressway. Behind its capable performance is a Model 30 Chrysler Industrial Engine. At 230 cubic inches piston displacement, Chrysler Model 30 Engine with chain drive front end offers high-speed performance in a package small enough to permit the largest possible payload.

Chrysler gýrol Fluid Coupling transmits power from driving to driven members, smoothing out the jarring shocks of clutching and declutching, improving performance and extending life of equipment, engine and transmission.

Whether your equipment requires gasoline, natural or L-P gas burning carburetor engines, gear or chain drive front-ends, gýrol Fluid Coupling, Chrysler torque converter, 3, 4 or 5-speed transmission, vertical

or horizontal magnetos, Chrysler can supply industrial engines equipped to your needs. And since Chrysler production-line methods are adapted to specialized industrial engine building, custom-built engines are provided at mass-production prices.

For your needs see a Chrysler Industrial Engine Dealer or write: **Dept. 1121, Industrial Engine Division, Chrysler Corporation, Trenton, Michigan.**



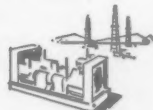
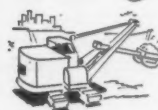
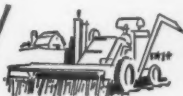
CHRYSLER *Industrial Engines*

INDUSTRIAL ENGINE DIVISION • CHRYSLER CORPORATION

HORSEPOWER



WITH A PEDIGREE



AGRICULTURE • INDUSTRY • CONSTRUCTION • OIL FIELDS



JET IGNITION

THE tough job of lighting a match in a tornado will give you some idea of the problem of firing a jet engine on the ground. Even more difficult is refiring the engine in flight should a flame-out occur—especially at high altitude.

Up there you not only have to reckon with low-volatility fuel but with rarefied air rushing through your engine at super-hurricane speed. Here, you can be certain, is a mixture that violently resists igniting!

Our Scintilla division at Sidney, N.Y., developed a special ignition system with the answer: a super-spark hot enough to fry a rock and of sufficient duration to fire and refire jet engines quickly. It has worked so successfully that, today, Bendix-Scintilla Jet Ignition Systems have been selected as standard equipment by most of the leading jet engine manufacturers.

Nation's Foremost Source

Bendix-Scintilla is known to engine people everywhere as the nation's top source of supply for ignition equipment. Most military planes rely on our ignition, and we doubt if you can ride on a commercial airliner that isn't sparked by Bendix-Scintilla. Your power lawn mower, farm or garden tractor or outboard motor may have one of our many types of magnetos developed for such applications. Leading automotive manufacturers experimenting with turbojet engines in passenger cars, trucks and buses are using Bendix-Scintilla Jet Ignition.

Continual research and years of practical field operation have fitted us to anticipate and solve ignition problems; and that's why engine manufacturers, seeking advice, talk to Bendix-Scintilla people.

This
aviation
ing and
cores of
contribut
ing your
Why not
lead for
and You
Enginee
unlimited
enced m
for the
future."
BENDIX
isher Bu



Nights matches in man-made tornadoes!

This chapter is part of the over-all story of Bendix Aviation Corporation, a story of successful work in developing and making nearly a thousand different products for scores of basic industries. No doubt some of our products can contribute to your business by improving your operation and cutting costs. Why not write on your company letterhead for the interesting digest "Bendix and Your Business."

Engineers: Bendix diversity offers unlimited opportunity to both experienced men and undergraduates. Write for the brochure "Bendix and Your Future."

BENDIX AVIATION CORPORATION
Fisher Building • Detroit 2, Michigan



PRINCIPAL DIVISIONS AND BASIC PRODUCTS

SCINTILLA, SIDNEY, N. Y.
aviation ignition systems; industrial engine magnetos; diesel fuel injection; electrical connectors, ignition analyzers.

RED BANK, EATONTOWN, N. J.
electron tubes; dynamotors; inverters; AC-DC generators.

BENDIX RADIO, TOWSON, MD.
radar; auto, railroad, mobile and aviation radio; television.

ECLIPSE MACHINE, ELMIRA, N. Y.
bicycle coaster brakes, Stromberg* carburetors, electric fuel pumps, starter drives.

ZENITH CARBURETOR, DETROIT, MICH.
automotive, marine and small engine carburetors.

BENDIX-SKINNER, DETROIT, MICH.
micronic filters.

PACIFIC, NORTH HOLLYWOOD, CALIF.
telemetering equipment; hydraulic and electric actuators; depth recorders; boat steerers.

BENDIX FRIEZ, TOWSON, MD.
meteorological instruments, precision instruments and recorders.

BENDIX PRODUCTS, SOUTH BEND, IND.
automotive brakes, carburetors, power steering; aviation brakes, landing gear, fuel metering.

ECLIPSE-PIONEER, TETERBORO, N. J.
aviation instruments and components; foundry.

MARSHALL-ECLIPSE, TROY, N. Y.
brake blocks, brake lining, synthetic resins.

CINCINNATI, CINCINNATI, OHIO
automatic viscosity regulators, nuclear products.

BENDIX COMPUTER, LOS ANGELES, CALIF.
digital computers.

HAMILTON, HAMILTON, OHIO
jet engine controls and aircraft pumps.

LAKESHORE, ST. JOSEPH, MICH.
power steering and automotive devices.

UTICA, UTICA, N. Y.
aviation components.

MONTROSE, SOUTH MONTROSE, PA.
aviation components.

PIONEER-CENTRAL, DAVENPORT, IOWA
aviation instruments and components; ultrasonic cleaners.

YORK, YORK, PA.
electronic devices; test equipment.

BENDIX-ECLIPSE OF CANADA, LTD.
Windsor, Ont.

BENDIX INTERNATIONAL
New York City

*REG. U.S. PAT. OFF.
†TRADE-MARK



CARBURETOR It's dissected as women concentrate on the job.



POLISH It can be part of woman's household chores, so service station attendant explains how to do it.



PLUGS "So that's what a spark plug is!" Mechanic tells women what it does, when and why to replace it.

Women Customers—They're in Ev

Right now some 60 garagemen in various cities are holding forth to groups of women (cover and pictures), who are raptly taking courses in the basic anatomy of the automobile. These courses are one manufacturer's bow to the new fact that women—sometimes through choice, sometimes through necessity—are breaking into markets that used to be for men only.

Companies that traditionally serve both sexes have made this bow, too, of course—as Trans World Airlines is doing with its program to promote women's air travel (BW—Sep.25'54, p116). But nothing is sacred today, the men-only marketers have decided. Women are learning to operate power tools (BW—Dec.11'54,p48); they are

smoking pipes (BW—Jul.24'54,p80). And the automotive trade is another good example.

I. Car Charm Course

The industry figures one-third of the 70-million motorists on the road today are women—yet the housewife who knows the difference between a spark plug and a carburetor is a rare bird. The Alemite Division of Stewart-Warner Corp., Chicago, sees in these two facts a royal opportunity to develop a lot of goodwill for its dealers, to even out sales bumps in its lubrication service, and to step up sales.

Gas, Gaskets, and Glamor is Alemite's pitch to the ladies. That's the

title of an intensive training course for women drivers. Response has been so enthusiastic that the 60 courses in operation in December will be more than doubled by the end of January. By fall, 800 courses will be under way.

The faculty are the participating Alemite dealers and their servicemen. There are six two-hour sessions, made palatable by the use of nontechnical language, films, a cutaway model, and real cars.

The students pay an enrollment fee of \$1. Dealers bear the rest of the tuition expenses, which come to around \$10 a pupil. Housewives, teachers, office girls—almost all of them married—make up the classes. Some come in mink, some in toreador pants. When



TIRE CHANGING One way to do it is to do it yourself, women are told. Attendant starts by showing them how to work a bumper jack.

in Every Market Now

they graduate, they get orchids and diplomas.

• **Ten Easy Lessons**—Developed by Gwynne DeCoverly, the company's automotive adviser, the curriculum includes: the fundamentals of the fuel system (if your car stalls from vapor lock, wrap a wet rag over the fuel pump); the electrical network; the cooling system; braking system; lubrication; maintenance of upholstery and exterior; the safe and easy way to change a tire.

Students also learn the fine points of driving for safety, economy, or better car performance.

• **Women's Questions**—A typical course is one offered by Henry Kearns, of San Gabriel Valley Motors, Lincoln-Mercury dealer in a Los Angeles

suburb. Kearns so far has put 500 eager-beaver women through the course (pictures), and apparently plenty more are on the way.

Kearns's teachers are amazed at the way their pupils lap up the stuff. The questions come thick and fast—and they include some that women normally would be afraid to ask lest their men laugh at their ignorance. One woman admitted that she had tried to add a quart of oil to the family car by dripping it through the dip-stick hole instead of the regular oil inlet. The instructor didn't laugh; he just said that was rather like trying to stuff a turkey through the neck.

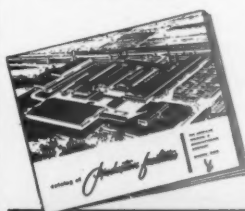
• **Sales Slant**—Throughout the course, the dealers make their pitch: They



...we can make them

In addition to ferrous metals, American Welding also produces components of titanium, aluminum, cobalt alloys, and copper.

Do you require a ring, a band, a circular assembly, or a complicated welded component like the oil tank above (used in the turret control mechanism of a jet bomber)? American Welding is equipped to produce it from any weldable ferrous or non-ferrous metal. For complete information on what American Welding can do for you—write our Product Development Division today.



Ask for Free
Catalog of
Production
Facilities









THE AMERICAN WELDING & MANUFACTURING COMPANY

380 DIETZ ROAD • WARREN, OHIO

FACTUAL Appraisals

for every valuation need

-  Insurance — coverage and proof of loss.
-  Property, cost and general accounting.
-  Corporation finance.
-  Legal requirements.
-  Purchase or sale.
-  Reorganization, merger or consolidation.

THE LLOYD-THOMAS

RECOGNIZED APPRAISAL AUTHORITIES CO.

4411 Ravenswood Avenue, Chicago 40, Ill.

First for Factual appraisals
— since 1910 —

OFFICES IN PRINCIPAL CITIES



REVOLVATOR RED-GIANT

features
Safety-Ease

Durability — built in by 50 years of Revolvator Co. experience — is still the fundamental of the Red Giant lift-truck line. Maneuverability, plus the safety of their exclusive double stroke mechanism, make the models shown leaders in their fields. There is a Red Giant lift-truck available for every use — for every capacity.

Write for the full facts today.



REVOLVATOR CO.

8711 Tonnele Ave. North Bergen, N. J.

"... now the women appreciate what goes on when they leave a car for servicing . . ."

WOMEN starts on p. 34

stress the wisdom of regular lubrication, and the benefits of having the work done in midweek. Alemite's immediate objective, in fact, is to spread the servicing more evenly. Monday, Saturday, and Friday are the big days for car lubrication; Tuesday, Wednesday, Thursday are practically stagnant.

There are important side benefits, too.

Says Kearns: "It would have been impossible to buy the goodwill we have engendered through Gas, Gaskets, and Glamor. Now the women appreciate what goes on when they leave their car for servicing. They get a better understanding of those bills their husbands have been bringing home." Kearns can even trace the sale of a few 1954 Lincolns and Mercurys directly to his school.

II. The Great Change

This sudden interest in the women's angle stems naturally from the great shifts in postwar society. The march to the suburbs has put more women at the steering wheel than ever before.

Except in congested city areas, today's housewife spends a fantastic amount of time behind the wheel. The Lamp, published by Standard Oil Co. (N.J.), labels the car "the housewife's second home." It traces the activities of a suburban mother who racks up 1,500 mi. a month on her speedometer — a lot more than most women in local driving but not phenomenal.

• **Home on the Road**—Women chauffeur their husbands to railroad stations; they cart their young to Scout meetings, Sunday school, nursery school, dancing school. They may do it for their own families or in car pools—but drive they must. Regional shopping centers, with room to park, pull women and their cars out to a wider radius. Friends in other suburbs lure them longer distances for social activities.

Whether women enjoy their new function or whether they do it because they have to is debatable. Maybe a woman would rather have her husband take care of the grubby repairs and servicing on weekends. But he often doesn't see it that way. His "leisure" weekend activities—including the demands of do-it-yourself—make him disinclined to put in time at the service station during his free hours.

• **Keeping Up With Father**—Alemite dealers report some psychological rea-

sons why women go for the training they offer. The war, which sent so many women to defense plants, undoubtedly helped break down the historic female feeling of abject helplessness in the face of machinery. "The whole feminist cult drives the women into new fields of conquest.

Women don't like to feel dumb, Alemite's dealers report, and they do feel dumb when they go to a service station. A pert blonde commented, "My husband said women shouldn't know anything about autos, so I took the course just to show him."

From the marketing standpoint, the important fact is not whether she wants to acquire this knowhow or not; it's the fact she is doing it that counts. A gas station owner, in business since 1947, estimates that when he first opened shop, seven out of 10 of his customers were men. Now it's just the other way around.

• **Power of Woman**—The emergence of the woman and her car as an important social phenomenon raises a pertinent question. How powerful a purchasing agent is she? Does she have a say in choosing the make of car? Does her interest go beyond styling? How great is her concern for safety? Does she decide which gas, oil, tires, to buy? Or is she merely her husband's obedient servant?

The answer depends on the answerer. Hearst Magazine's Marketing Div. found that women influence 56% of the purchases of gas and oil, handle 55.9% of the car servicing. A Fawcett survey claimed that male influences on purchases of gas, oil, and TBA items (tires, batteries, accessories) averaged over 90%. Coca-Cola found in a 1952 study of some 15,000 service station customers that men drivers made 75% of all the purchases paid for by both motorists and passengers.

In the face of the conflicting evidence, a few big companies, as National Petroleum News, a McGraw-Hill publication recently pointed out, are overlooking no bets.

III. The Woman's Touch

Cities Service Co. has staffed each of its 10 stations on the New Jersey Turnpike with a highway hostess, known as a Pike-ette. She greets travelers, is ready with information about anything from the name of a nearby doctor to the latest weather forecast. When it operates on the Garden State Parkway in the same state, the company plans a similar service.

Cities Service is also building its new stations with an eye to their woman-appeal. Women motorists tend to stay away from stations that look crowded or that have narrow lanes that augur a crumpled fender. So the company

BEFORE YOU BREAK GROUND

Construction of a new plant starts when the steam shovel takes its first bite of earth. But the actual building process begins *before* you break ground.

It begins when the need for new plant facilities is recognized and engineers are called into action. Then it develops on the drawing board—through plant layouts, working drawings, engineering specifications. It requires consideration of engineering and production techniques—analysis of all factors that must be taken into account before construction can start.

Ebasco skilled engineers and constructors have experience in every phase of the building process—from preliminary planning right up to a plant's successful operation. This experience has enabled Ebasco to complete more than two billion dollars' worth of new plant design and construction for many industries, in many parts of the world.

The engineering and construction firm you select to design and build your plant may well hold the key to its future success. If you are considering such a project, send for our booklet, "The Inside Story of Outside Help." It describes our engineering and construction services as well as the wide range of consulting services Ebasco offers business and industry. Write: Ebasco Services Incorporated, Two Rector Street, New York 6, N. Y.



NEW YORK • CHICAGO • DALLAS • PORTLAND, ORE. • WASHINGTON, D. C.

Appraisal • Budget • Business Studies • Consulting Engineering • Design & Construction • Financial • Industrial Relations • Inspection & Expediting • Insurance, Pensions & Safety • Purchasing • Rates & Pricing • Research • Sales & Public Relations • Space Planning • Systems & Methods • Tax • Traffic • Washington Office

aining
nt so
, un-
e his
pless-
The
omen

lumb,
ey do
ervice
ented,
uldn't
took

t, the
wants
t; it's
ts. A
since
first
of his
st the

gence
n im-
ises a
rful a
s she
ake of
d styl-
n for
as, oil,
er hus-

ne an-
keting
e 56%
handle
awcett
ces on
items
eraged
a 1952
station
e 75%
y both

ng evi-
as Na-
Craw-
d out,

h
d each
Jersey
nostess,
s trav-
about
nearby
orecast.
n State
e com-

its new
voman-
to stay
crowded
augur
mpany

5, 1954



What's in it for you?

In a word . . . plenty! Buell engineers, who specialize in the collection or recovery of valuable industrial dusts, can tell you *exactly* how much!

For over twenty years, Buell Engineers have converted stacks into profitmakers for many of America's leading corporations. Buell's knowledge and experience is combined with specialized equipment capable of handling *any* dust collection problem.

Buell's continued leadership is exemplified in the success of the famous Buell 'SF' Electric Precipitator. Dozens are now in successful operation from Pennsylvania to Peru.

It will pay to know the *complete* facts about *all three* Buell Systems of Industrial Dust Recovery! They are simply and clearly explained in our informative brochure—The Collection and Recovery of Industrial Dusts. Send for your complimentary copy today. Write Dept. 30-L, Buell Engineering Company, 70 Pine Street, New York 5, N. Y.

buell®



20 Years of Engineered Efficiency in
DUST RECOVERY SYSTEMS

is stressing color, attractive uniforms, lighting, cleanliness—and plenty of room to move around.

• **Shell's Game**—Shell Oil Co. is celebrated throughout the industry for its Carol Lane program. By engaging a woman's travel director five years ago, Shell hoped to win friends among women who buy gas or have some say in the matter. It hoped to build goodwill for the oil industry against the time when adverse legislation looms.

The Carol Lane program operates through women's clubs. Carol Lane gives lectures, the high spot of which is a demonstration of how to pack for motoring. These lectures are strictly noncommercial, but the newspaper publicity and TV and radio appearances help to keep the Shell name in circulation.

Texas Co. also puts "women appeal" into its advertising campaign for Texaco Sky Chief.

• **Another View**—However, many people in the oil industry insist that the woman is not a big factor in their business.

Says a spokesman of one company: "A car is still a pretty expensive piece of machinery. Once it has been bought, it's the husband who assumes command."

• **Car-Buying**—Unlike the oil companies, car manufacturers agree 100% that the woman is a VIP in their business. A Crowell-Collier Automotive Survey reports that women influence 75% of automobile sales, and Detroit does not quarrel with this.

So far, car makers have wooed the women's market mainly through styling of cars. This largely explains the recent outburst of rainbow colors, the attention to more lavish interior decor.

Most manufacturers believe women's interest ends with how the car looks. They suggest, though, that such mechanical factors as power steering, power brakes, and power seats are good sales features for the weaker sex. Housewives are interested, too, in safety. That's why, the tire companies say, they like tubeless tires.

• **Bid for Future**—There are other straws to indicate that the woman is in the automobile to stay. Good Housekeeping has an automobile editor, Charlotte Montgomery, who also issues a Women's Page Automotive Clip Sheet for the National Automobile Dealers Assn. Woman's Home Companion has a Home, Garden, and Automotive Workshop.

An official of an oil company suggests that the automotive industry might do well to take more heed of this market potential. Women are smart shoppers in their own domain, he points out. It might pay to educate them—as Alemite is doing—to the advantages of a specific brand.



Safety on the job is not accidental!

ACCIDENT PREVENTION is serious business to the people of Union Carbide. They work with extremes of temperature and pressure in many fields, yet last year their over-all record was 73 per cent better than for U. S. industry as a whole.

1,500,000 MAN-HOURS and no lost time accidents... 2,500,000 man-hours with no disabling accidents... 24 years, covering a total of 5,668,533 accident-free labor hours. These are but a few examples of safety records at various Union Carbide plants.

IN RECOGNITION of these achievements, Union Carbide was granted the 1953 Award of Honor of the National Safety Council.

But safety goes beyond the plant with the people of Union Carbide. In many areas, they have enrolled in home safety programs. Through these, whole families learn how to avoid accidents—in the home, on the street, at school, and at play.

IN 1954, Union Carbide plants received 133 awards from the National Safety Council. These awards, given in recognition of plant and home safety programs, included six Awards of Honor and nineteen Awards of Merit.

THE PEOPLE OF UCC are proud of these awards. But their greatest satisfaction comes from the knowledge that they are helping to increase safety—both on and off the job.

FREE: Learn how *ALLOYS, CARBONS, GASES, CHEMICALS, and PLASTICS* improve many things that you use. Ask for "Products and Processes" booklet N.

UNION CARBIDE

AND CARBON CORPORATION

30 EAST 42ND STREET  NEW YORK 17, N. Y.

In Canada: UNION CARBIDE CANADA LIMITED

UCC's Trade-marked Products include

SYNTHETIC ORGANIC CHEMICALS	ELECTROMET Alloys and Metals	HAYNES STELLITE Alloys	PYROFAX Gas	LINDE Oxygen
EVEREADY Flashlights and Batteries	Dynel Textile Fibers	PRESTONE Anti-Freeze	UNION Carbide	NATIONAL Carbons
BAKELITE, VINYLITE, and KRENE Plastics		PREST-O-LITE Acetylene		ACHESON Electrodes



Teeming molten steel into giant ingots—working the bargain metal that's always working for you

In this Peter Helck painting, which shows liquid steel being teemed into ingot molds, the artist has illustrated both an end and a beginning. The end of steel-making. The beginning of steel-working. For when molten metal has been poured into ingots ("teeming" is the metal-workers' term for the pouring operation), the basic business of steel-making is ended. The ingot—first solid form of steel—must then be worked into the steel products used by industry . . . the tinplate, sheet steel, bars, strips, shapes and coils produced by National Steel. At Great Lakes Steel division, National's big steel plant near Detroit, we're now

teeming bigger ingots—twenty-ton giants. From bigger ingots we get bigger slabs, which can be rolled into wider sheets and longer coils. So for the auto makers, and others who use wide-sheet steel, we're now producing coils up to 77 inches wide—with unwelded sections several times longer than in coils made previously. And with coils like that, production goes up and scrap loss goes down.

For National Steel, the production of bigger ingots and wider and longer coils

is but another step in a continuing program to provide all of industry with more and better steel.

Completely integrated, entirely independent, *this* is National Steel—one of America's great steel producers.

New Color Film Now Available

"Achievement in Steel" . . . a new 16-mm color film telling the dramatic story of steel is now available to organized groups. To obtain this film for your group, write to "Achievement," National Steel Corporation, Pittsburgh, Pa.

NATIONAL STEEL
GRANT BUILDING



CORPORATION
PITTSBURGH, PA.

S E R V I N G A M E R I C A B Y S E R V I N G A M E R I C A N I N D U S T R Y

S
WEL
S
HANNA I
Cleveland
iron ore
ings in th

This is National Steel

SEVEN GREAT DIVISIONS WELDED INTO ONE COMPLETE STEEL-MAKING STRUCTURE



GREAT LAKES STEEL CORP.

Detroit, Mich. A major supplier of standard and special carbon steel products for a wide range of applications in industry.



WEIRTON STEEL COMPANY

Weirton, W. Va. World's largest independent manufacturer of tin plate. Producers of many other important steel products.



STRAN-STEEL DIVISION

Ecorse, Mich. and Terre Haute, Ind. Exclusive manufacturer of famous Quonset buildings and Stran-Steel nailable framing.



HANNA IRON ORE COMPANY

Cleveland, Ohio. Producer of iron ore from extensive holdings in the Great Lakes area.



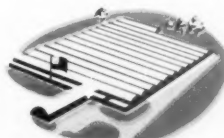
THE HANNA FURNACE CORP.

Buffalo, New York. Blast furnace division for production of various types of pig iron.



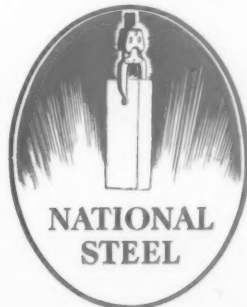
NATIONAL MINES CORP.

Supplies high grade metallurgical coal for the tremendous needs of National Steel mills.



NATIONAL STEEL PRODUCTS CO.

Houston, Texas. Warehouse and distribution facilities for steel products in the Southwest.





OPERATION SKYHOOK

Since that memorable day in 1903, when Orville Wright soared 120 feet over the windswept dunes at Kitty Hawk, endless hours have been devoted to increasing the range and time-in-flight of American military aircraft. At Fletcher Aviation, our highly skilled engineers have worked on this vital problem for 320,120 hours during the past seven years.

Because of our work, and that of others, it is now possible for modern aircraft to triple their

range and time aloft by using external wing tanks. Still, we are not satisfied. We are currently co-operating with the AMC on the development of in-flight refueling equipment which will permit America's air arm to attain maximum global mobility.

We are proud of this opportunity to further the progress of American aviation through "Operation Skyhook."

FLETCHER **aviation corporation**

World's largest designers & manufacturers of external wing tanks
FLETCHER AIRPORT • ROSEMEAD, CALIFORNIA
SERVICE OFFICES: DAYTON, OHIO • WASHINGTON, D.C.
OFFSHORE AFFILIATES: OSLO, NORWAY • TOKYO, JAPAN

Justice Hits Price-Fix Anew

Government charges Philco Corp.'s distributor contracts eliminate competition . . . Spiegel sells its 53 retail fashion shops to Darling chain . . . GE pushes "planned obsolescence" program for appliances.

The Justice Dept. has opened up a new front in its attack on retail price maintenance.

In Philadelphia last week, Justice hauled Philco Corp. into a federal court on charges that the company's new contracts with its distributors violate antitrust laws by eliminating competition on wholesale and retail levels.

Philco set up the new contracts last summer (BW—Aug. 14 '54, p81) in an effort to keep its appliances and other price-set products from falling into the hands of discount houses and price-slashing retailers.

According to Justice, Philco's new contracts include these requirements—which the government charges stifle competition: (1) Distributors can sell Philco's price-fixed items only to those retail outlets that Philco "approves" (in other words, those dealers Philco can count on to hold its price line); (2) distributors cannot sell to retailers for resale to other retailers (a practice known as transshipment to discounters); (3) distributors cannot compete with other Philco distributors.

Justice charges that these provisions keep "non-approved" dealers from handling the Philco line, and keep rival manufacturers from distributing their lines through Philco distributors.

Philco Pres. James Carmine was quick to issue a formal denial, and defended his company's contracts on the grounds that they represent "an established distribution system which has been widely used for years by manufacturers of brand-name products to protect the public."

A discounters' housecleaning was predicted last week by spokesmen for the National Assn. of Discount Merchants, the price-cutters' trade group. NADM said it will concentrate this year on weeding out "sloppy shops" and "sharp operators" who give the discount house a black eye.

Spiegel, Inc.—big Chicago mail order house—has sold its 53 retail fashion stores to Darling Stores Corp., specialty store chain, for some \$3-million.

Spiegel's, which has had profit problems for some time, will concentrate on its mail order operations. The company still holds some 70 or 75 retail

outlets, including junior department stores, auto accessory shops, and furniture stores. The company's sales are still down—4.2% for the first 11 months of this year.

Rexall Drug, Inc., has dropped out of merger negotiations that would have formed the biggest drug chain in the U. S. (BW—Dec. 8 '54, p112). Rexall Pres. Justin Dart said last week that talks involving the sale of Rexall's retail stores to United Cigar-Whelan Stores Corp. and Sun Ray Drug Co. "have been concluded. There will be no sale . . . and no further negotiations are contemplated." Merger of Whelan and Sun Ray is still brewing.

General Electric Corp. has hopped aboard the "planned obsolescence" bandwagon.

Company spokesmen last week compared the appliance business to the automobile field, contending that car manufacturers have got a bigger share of consumer dollars by bringing out new models each year. GE officials said that from now on more newly designed household appliances would be marketed each year, and cited GE's new line of colored and built-in kitchen appliances as showing the trend (BW—Nov. 20 '54, p31).

Rich's, giant Atlanta department store, is talking merger with Cain-Sloan Co. of Nashville. Trade circles believe Rich's is out to make itself an even bigger giant of the South. (Last year it acquired control of S. H. George & Sons in Knoxville.) If the merger goes through, Cain-Sloan will keep its name and present management. A deal might give the Nashville store a better chance to complete its new building, which bogged down in a lease battle with Harvey Co. (BW—Mar. 27 '54, p124).

Merger of Clinton Foods with National Starch Products fell through, even though Clinton got rid of Snow Crop, in which National Starch wasn't interested (BW—Dec. 11 '54, p42). Neither company would explain why talks ended, but reportedly Clinton upped its asking price during negotiations.

Is Downtime



Upping Your Costs?

CUT IT

with

Manzel

FORCE FEED LUBRICATORS

* Management knows that lost production added to the cost of repairs can mount when machinery breaks down. The culprit is often faulty lubrication. Manzel Force Feed Lubricators eliminate those losses by providing dependable, automatic lubrication under pressure with round-the-clock precision. They save labor and lubricants, too. Investigate Manzel systems for your present mechanized equipment—or for new equipment you are installing. And remember, if you have a particularly difficult lubrication problem, Manzel engineers are waiting to help you solve it.



DIVISION OF FRONTIER INDUSTRIES, INC.

333 Babcock St.
Buffalo 10, New York

MANAGEMENT

TYPICAL STOCK OPTIONS: The Bull Market Makes Them Worth a Lot

Here are four examples:

	Date of Grant	Number of Shares on Option	Purchased Since July 1, 1954	Option Price	Market Value Now (Closing Price, Dec. 16, 1954)	Possible Gain After Taxes Based on Current prices**
1. President of a Building Materials Company	Nov. 21, 1950	15,000	5,040	\$70,056	\$124,740	\$41,013
2. President of an Aircraft Company	Feb. 12, 1951	20,000*	10,000	\$247,500	\$1,040,000	\$594,375
3. President of a Consumers Product Company	April 23, 1953	—	5,000	\$170,000	\$362,500	\$144,375
4. President of a Materials Processing Company	July 17, 1951	25,000*	15,000	\$423,975	\$913,125	\$366,863

Data: N. Y. Stock Exchange. *Later adjusted for splits.

**Maximum capital gains tax (long-term) is 25% if stock is held six months.

1954 Was the Payoff Year

The figures in the right hand column above show incentive compensation for executives in its most glamorous form—the stock option plan at a time when it's working in a bull market.

Take the second case, the aircraft company president. Last year his total compensation—salary, bonus, and pension credits—was around \$150,000 before taxes. A good guess would put his take-home pay after taxes at not more than \$75,000.

But look at what's happening to his stock option. Next Jan. 30, if he chooses to do so, he can sell the 10,000-share block of his company's stock that he bought on his option plan last July—and he can pocket an after-tax gain of \$594,375 (that's assuming, of course, that the market value holds up for the next few weeks). At his present salary it would take him eight years to acquire that much.

• **Hundreds**—This is an unusual example—but only in the large amount of dollars involved. Hundreds of other corporation executives can tally up attractive profits or potential profits from stock options.

Two reasons are plain: (1) The legalizing of restricted stock options in

1950 brought on a wave of plans in the two or three years that followed (BW—Apr. 7 '51, p45); (2) two factors—the expiration of the holding time required by restricted plans, and the continuing bull market—combined to make 1954 the biggest year so far for exercising options.

The bull market, naturally, is the principal factor making for profit; an end of the bull market would mean that such profits would no longer be possible through stock options.

• **How It Works**—A typical restricted stock option plan of the type made legal in 1950 works like this: Company A hires a new president. As an incentive, he gets an option to buy 10,000 shares of A's stock. The price is fixed at \$47.50 a share—95% of the stock's market price the day of the grant.

One condition is imposed by the company: The executive can't exercise the option for 12 months. There are other conditions imposed by the tax laws before the executive can treat profits as capital gains, not income, if he eventually sells his stock: He must hold the option or the stock for at least two years, and he must hold the stock for at least six months.

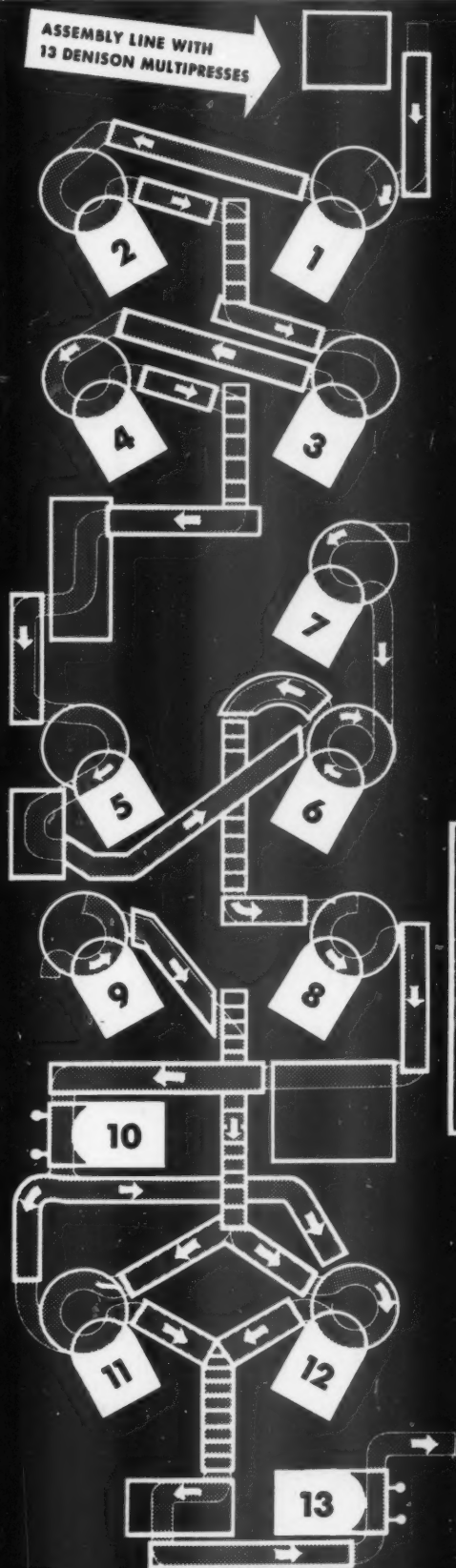
• **Cash**—The executive, of course, must find some way to raise the money when he decides to buy. Before the bull market, this may have been why many executives failed to exercise their options—they couldn't raise the cash. A few companies make loans to their own people. But in most instances the man must go to the bank.

At the bank, current margin rates require a borrower using stock as security to put up shares worth twice the amount of the loan. So unless the stock has taken a healthy ride, the executive exercising his option must get some of the cash elsewhere. But if the stock has at least doubled in price, as many have done in the past few months (page 68), the executive has enough security for a bank loan to buy it at the option price.

That is how the bull market has made it possible for many executives to buy hundreds of thousands of dollars worth of stock.

• **To Sell, or Hold?**—What many of these men may do is hold this stock six months, then sell enough of it to pay off the bank loan. Some of course may take profits beyond that. There could be deterring factors, though. For

ASSEMBLY LINE WITH
13 DENISON MULTIPRESSES



Assembles
13,000 auto door-locks
per day with

DENISON MULTIPRESS®

THIS COMPANY set out to assemble 10,000 auto door-locks per 16-hour day . . . beat its goal by 3000 with Denison Multipress.

With a line of 13 Denison hydraulic Multipresses, Reid Products Division of The Standard Products Company assembles 13,000 door-locks . . . 34 pieces per lock.

Parts are carried on conveyors and chutes.



Loading for staking of
five-part sub-assembly

Operators load component parts on Denison Index Tables which position them under the hydraulic ram up to 70 times a minute.

Assembly line takes up only 500 square feet.

If you have a problem in automatic operation. . . or any job that calls for controlled pressures up to 75 tons, bring it to Denison. Write to:

THE
DENISON ENGINEERING COMPANY
1238 Dublin Road • Columbus 16, Ohio

DENISON
TRADE MARK *HydrOILics*



HYDRAULIC PRESSES
MOTORS • PUMPS • CONTROLS

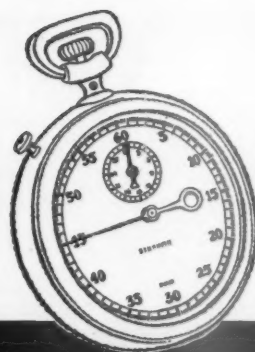
must
money
the
why
their
ash.
their
nces

ates
cur-
the
the
ex-
get
t if
ice,
few
has
buy

has
ives
dol-

of
lock
to
urse
ere
For

45 seconds



from dead stop

Electro-Mobile Power

Here's the low-cost answer to electric utility needs in fringe area interim boosting

On the line within 45 seconds—automatically synchronized in frequency, voltage and phase—that's how fast Electro-Mobile Power units can swing from dead stop into full output of needed current.

Electric utilities can have this source of supplementary power where it's wanted in a matter of minutes or hours—just the time it takes to move it to the desired site by rail or highway.

Those are just two results of General Motors' Electro-Motive Division bringing to bear on electric utility problems its two decades of experience with Diesel-Electric mobile generating equipment.

The units represent well-proved components, plus the last word in electrical engineering and materials.

Its radically lower cost reflects mass-production economies afforded by long-established plants.

The units are designed for phenomenal life and a unique replacement program guarantees that they always can be kept abreast of future advances.

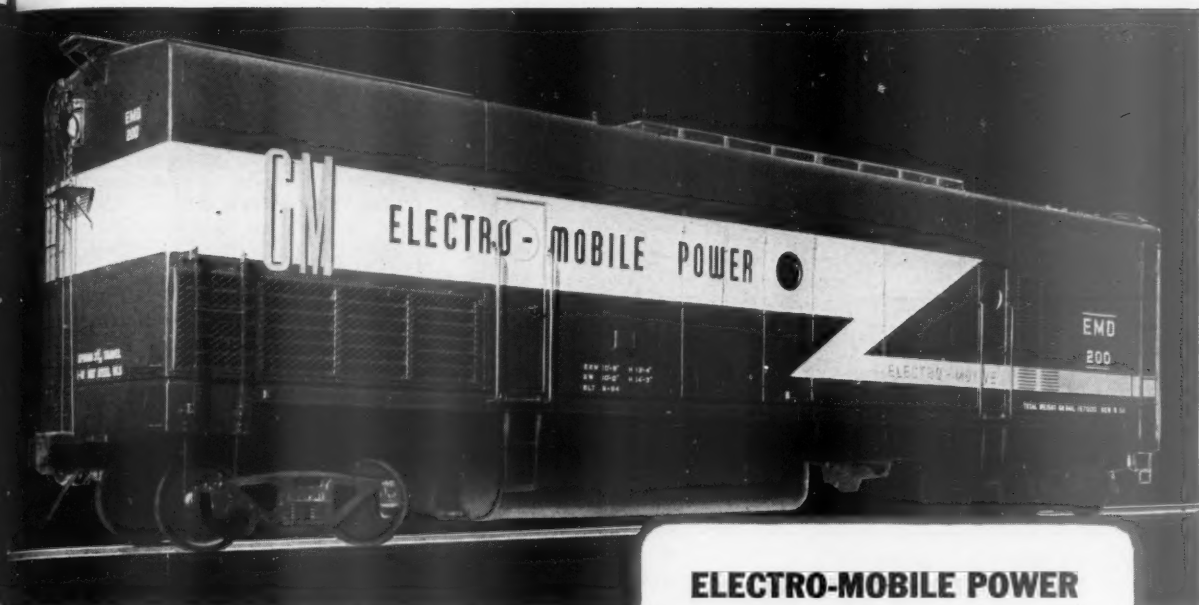
For a discussion of how your utility can apply this investment most profitably, write to:

Electro-Motive Division

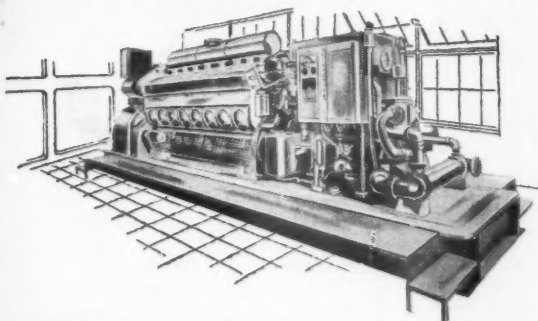
GENERAL MOTORS
LA GRANGE, ILLINOIS

Sold and serviced directly through a manufacturer's organization.
Electro-Motive Division offices located in:
New York City, Chicago, Jacksonville, St. Louis and San Francisco.

m demand to delivery—



RAIL CAR—1,000 and 750 kw. units for use on sidings or placed on piers for semi-permanent use

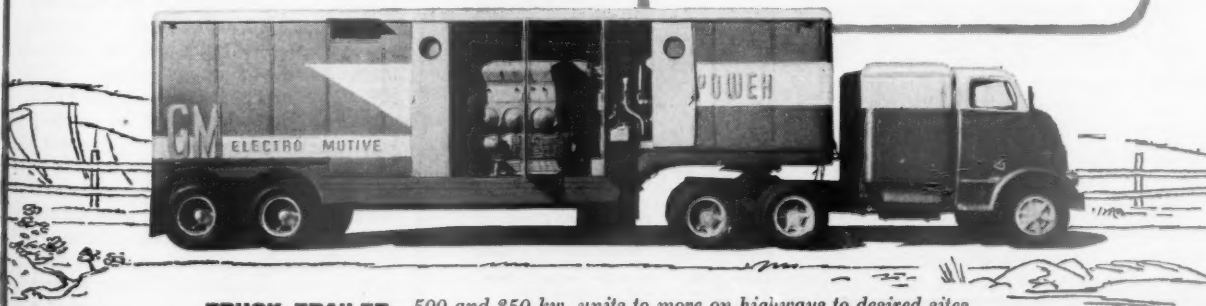


PORTABLE UNIT—1,000, 750, 500 and 350 kw. capacities for permanent or semi-permanent installations

ELECTRO-MOBILE POWER

FEATURES INCLUDE:

- Remote control starting and stopping
- From starting to full load within 45 seconds
- Automatic synchronization with line in frequency, voltage and phase
- Full protective equipment, including 3-phase surge capacitors, lightning arresters, over-current relays, field failure relay
- Complete self-operation can be provided
- Ability to meet higher capacity needs by unit multiplication
- Complete national parts and service availability



TRUCK TRAILER—500 and 350 kw. units to move on highways to desired sites



Equipment Freezes 18,000 Chickens Per Day



Above: View of the packaging end of the Ocoma production line.
Below: Three of the Frick refrigerating compressors at Ocoma Foods.



At the Poultry Processing Plant of the Ocoma Foods Company in Berryville, Arkansas. This recent addition to the rapidly expanding Ocoma Foods Company employs over 275 people, and incorporates all of the latest developments in production-line poultry processing.

Six Frick compressors supply the refrigeration necessary for the chilling, quick-freezing and cold storage phases of the process.

This is but one of hundreds of different applications of Frick refrigeration and air conditioning in the food industries.

When writing for literature, please describe the cooling work you have in mind.



WHEN BUSINESS MEN WANT BUSINESS NEWS THEY TURN TO BUSINESS WEEK



PRE-FORMED PACKAGING provides complete IN-CARTON suspension... fits contour of individual item. Made in easy-to-use rolls and pre-cut lengths and widths.

SUS-RAP is used by many of America's largest manufacturers to ship:

AUTOMOBILE WINDSHIELDS • MIRRORS • CLOCKS • NEON and PLASTIC SIGNS • GLASS REFRIGERATION SHELVES • MARBLE SLABS • STOVE TOPS • PORCELAINIZED PANELS • TV WINDOWS • HOLLOWWARE •

SUS-RAP is engineered to your requirements. For Complete Information MAIL COUPON TODAY!

VANANT CO., Inc. 1983 S. Allis St., Milwaukee 7, Wis.
Gentlemen:
We want to know more about SUS-RAP.
() Send literature () Have representative call
Name _____
Company _____
Address _____
City _____ State _____
VANANT COMPANY INC. 1983 S. ALLIS ST. MILWAUKEE 7, WIS.



One look at the crystal ball tells Speedy "Spec" that your business is in for keen competition in the days ahead. To stay in the lead, your products will have to be better than ever. And customers will insist on quick delivery of goods—undamaged on arrival. That's why SPECTOR, with expert crews operating modern trucks out of 17 strategically-located terminals, can predict a bright future for you through fast, safe, delivery!

SPECTOR

HOME OFFICE: 3100 S. Wolcott Avenue
Chicago 8, Illinois

TERMINALS: Boston • Bridgeport • Chicago • Decatur
Indianapolis • Milwaukee • Newark • New Britain
New York • Peoria • Philadelphia • Providence • Racine
Rome • St. Louis • Springfield, Mass.
Trenton • Worcester

instance, if a president sells a big block of his own company's stock—even if it's to take a nice profit—his associates and the stockholders may interpret this as a vote of no confidence in the company's future.

Then, too, the official purpose of options is to give top management a stake in the company. Some have even signed agreements that they were accepting their options as investments—not for speculation.

As it has turned out, many executives with options are now standing atop gold mines. Certainly few boards of directors anticipated that the bull market would be so strong or so lasting. Doubtless few could foresee that the risks would be so small in relation to the potential gains.

• **New Trend**—The risk angle has prompted many companies to try something a little different. According to Arch Patton, compensation specialist with McKinsey & Co., management consultants, there is a growing trend toward stock purchase plans. Here, the executive buys a block of stock from his company and agrees to pay for it in installments. If the stock goes up, he's buying at a bargain rate. If it slumps, he's paying above the market price.

In other words, there's a definite reward and penalty involved. Under the stock option there's a like reward if the stock goes up, but if it goes down the executive simply never exercises his option.

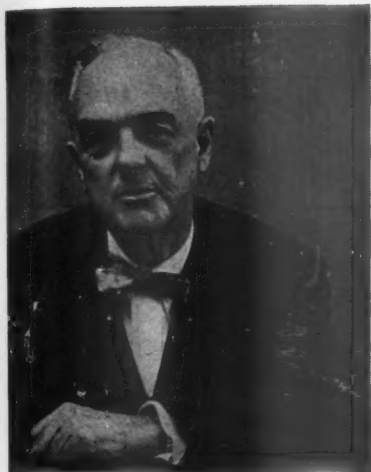
Officers Go Up

... at Dow Corning Corp., a jointly owned company gets its own president as part of a general redo.

Dow Corning Corp., Midland, Mich., jointly owned affiliate of Dow Chemical Co. and Corning Glass Works, last week got a president all to itself. Dr. William R. Collings, vice-president and general manager of Dow Corning since the company was formed in 1943, becomes the chief operating executive. He replaces Dr. Eugene C. Sullivan, who had doubled as honorary chairman of Corning Glass.

The move was part of a general reshuffle of the company, which makes silicone products, to give it more leeway in development of its markets. From a standing start, the company has grown to a sales volume close to \$20-million a year. A \$16-million expansion program is nearing completion.

Directors also named Dr. Shailer L. Bass, formerly assistant general manager, as vice-president of Dow Corning. Two new directors were named: Le-



Dr. William R. Collings



Dr. Shailer L. Bass

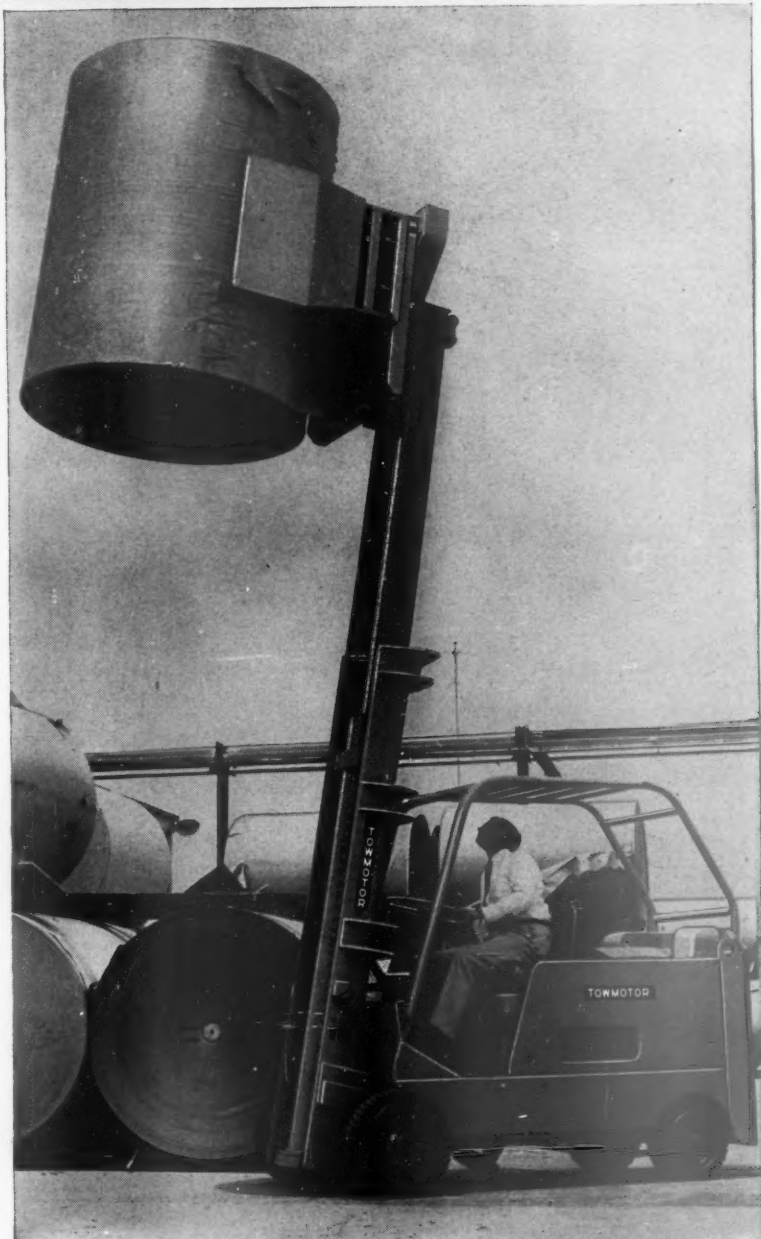
land I. Doan, president of Dow, and Carl A. Gerstacker, Dow treasurer. Doan becomes Dow Corning's chairman, with Dr. Sullivan as its honorary chairman.

Dow and Corning each now have four members on the affiliate's board. Collings and Bass also are directors, but represent only the interests of the affiliated company.

Interest in the Dow Corning reshuffle is heightened by the fact that the company is one of the "50-50" setups in which Corning Glass Works participates with another company. Another example is Pittsburgh Corning Corp., owned jointly by Corning Glass Works and Pittsburgh Plate Glass Co. Owens-Corning Fiberglas Corp. was established by Corning in conjunction with Owens-Illinois Glass Co. in similar fashion. The latest change in Dow Corning gives added stature to the operating heads of the organization although the ownership and control remains undisturbed.

TOWMOTOR
THE ONE-MAN-GANG

Job-Planned
FORK LIFT TRUCKS



Towmotor Upending Roll Clamp lifts, turns and high-stacks rolls mechanically. Cuts handling time and costs up to 80%.

Towmotorize your handling problems

On certain jobs, a job-planned Towmotor performs more efficiently and more economically than fork-equipped lift trucks. Write for Certified Job Studies giving facts on materials handling savings in *your industry*.

TOWMOTOR CORPORATION, Div. 212, 1226 E. 152nd St., Cleveland 10, Ohio

FOR FAST ACTION—See your nearby Towmotor Representative. He's a materials handling specialist. His factory training will show you the quickest way to attain maximum handling efficiency at minimum cost.

heavy handling costs less WITH A Whiting Crane!



The overhead crane that saves its user money is one that is *just right* for its specific job. "Too little" crane is as costly as "too much" crane. Whiting—with more than 60 years' experience in crane construction for firms throughout industry—engineers "just enough" crane for *future* as well as *immediate* needs. More efficient crane operation also helps to lower costs. For example, the new Whiting Selectodyne controls assure the fastest, most accurate lifting, moving and spotting. Ingenuity of Whiting Crane design makes possible large savings in maintenance. Better materials are used in Whiting Cranes... anti-friction bearings and precision-made gears reduce friction and wear problems... securely-fitted shafts and flanged couplings that stay tight provide peak performance. These, and many other outstanding Whiting Crane features mean a longer, trouble-free life that results in low-cost handling! Before you invest in any crane... investigate the Whiting Crane!

WHITING CORPORATION

15661 Lathrop Avenue, Harvey, Illinois

Write for the new Whiting Crane Bulletin—Unit 80... gives complete information on the 14 outstanding Whiting Crane features! Send for it today!



Whiting also manufactures..



Hoists

Trackmobiles



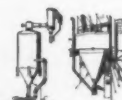
Trambeam Systems



Railroad Equipment



Chemical Equipment



Foundry Equipment



INTERNATIONAL OUTLOOK

BUSINESS WEEK

DEC. 25, 1954

A BUSINESS WEEK

SERVICE

Confidence is at a postwar high in Western Europe as the year ends—despite Soviet threats and political discord in France and West Germany.

Three developments account for the new mood:

- The striking economic comeback Western Europe has made this year.
- The strong but flexible leadership Washington is now giving to the Western Alliance.
- The new feeling of military security produced by last weekend's meeting of the North Atlantic Treaty Organization.

NATO's revelation that tactical atomic weapons are usable immediately in defense has convinced Britons and Europeans of two things:

- A Soviet ground attack could be held during the critical first few weeks, even with present forces.
- Because the Russians have only a limited supply of nuclear bombs and long range bombers they would have to hit first at rural air bases rather than the big European cities.

Observers now think that with a year of political stability in Paris and Bonn, Western Europe would really be back on its feet.

Then, they feel, Moscow will have only one card left to play in Europe—a genuine offer of German unity.

Washington and London don't exclude the possibility that, after ratification of German rearmament, Moscow will shift its German tactics and play the unity card.

American and British officials think this might follow Soviet-produced incidents in Berlin and Austria.

If Moscow plays it this way, Chancellor Adenauer will be in a tough spot. There's no real enthusiasm in West Germany for the London and Paris agreements. In fact, popular opposition to rearmament is stronger than anyone expected, which explains why Adenauer has been losing ground politically.

Premier Mendes-France doesn't expect any serious trouble from Moscow after ratification.

He is betting on an East-West conference that would discuss regional arms control—the limitation of both Communist and Western ground forces in Europe.

The French Premier can't be sure, of course, that he'll be in office for such a meeting. It looks as if his political enemies may unseat him after ratification. But that wouldn't bring any basic change in French foreign policy.

Britain was pursuing its own economic self-interest this week when it linked up with the European Coal and Steel Community.

True, London's association provides a boost for the pool's prestige, and for the idea of European federation. But Britons were thinking as much, or more, of their continental and world markets.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
DEC. 25, 1954

British steel mills are at peak production, so are steelworks in the six Schuman Plan nations.

London feels the limited tieup with the pool will protect its position. The treaty signed this week does not put British steel and coal under the Community's direction. But it does provide for close contact, British consultation—and influence—in matters of price, trade, tariffs, quotas, technical problems.

John Bull is pleased with his economic performance in 1954. But Britons admit—with concern—that they aren't matching West Germany, either in production or export gains (BW—Dec. 18 '54, p. 128).

This week, Bonn announced that German industrial production had doubled—gone up 100%—in the past five years.

Autos are a hotly competitive example. German producers will wind up 1954 with an output of 675,000 vehicles, 38% above 1953. About 45% were exported. Within 18 months, you'll see production pushing 900,000. (Volkswagen, for example, has reached the 1,000-a-day mark.)

Few observers expect any real slowdown in West Germany. But they do look for a change in the character of the boom, especially when rearmament begins. The economy is running flat-out now; from here on German resources, especially manpower, will be strained, inflation may threaten, exports curbed.

Competition for world markets will be rough and ready in 1955. Prices may be easier.

Many raw material producing nations, courted by the big workshop countries, are shopping carefully. Their bargain hunting is having its effect. World prices for industrial products are falling.

Again, West Germans are in the van. Their average export prices are 4% below the 1953 average. U. S. prices are off 2%, Britain's, 1%.

India's Nehru will be caught in a crossfire next week when the Colombo Powers meet in Indonesia.

From one side Nehru will be under pressure from Ceylon and Pakistan to get behind the United Nations as it moves against Red China's imprisonment of American fliers.

From the other, Indonesia's Communist-backed Premier Sastroamidjojo will urge Nehru to join in calling an African-Asian conference that would try to mobilize Arab and Asian opinion against the West, especially the U. S.

You can be sure Nehru will turn down the Indonesia scheme and also duck any strong stand against Peking.

At home Nehru is trying to straddle on another basic issue—private versus government enterprise.

Last week he ordered nationalization of the country's largest bank, the Imperial Bank of India. Also he called for a constitutional amendment that would permit the government to nationalize land.

In almost the same breath, Nehru insisted that private enterprise, including foreign investments, would have plenty of scope in India.

Contents copyrighted under the general copyright on the Dec. 25, 1954, issue—Business Week, 330 W. 42nd St., New York, N. Y.



Would Damascus steel meet today's demands?

Damascus steel was the best . . . the finest steel that could be made with the materials and skill available at the time. But today infinitely finer steels are demanded for scores of uses and are being produced by routine methods, thanks to the development of ferro alloys.

Vanadium Corporation of America

produces ferro alloys which enable metallurgists to "build-in" almost any desired properties in the steel. Steel that can pulverize the hardest rock . . . take a keen cutting edge . . . withstand the terrific heat of jet operation . . . resist the bite of corrosive chemicals.

With such alloy steels, industry

today is doing its work with ever-increasing speed, efficiency and economy. And from VCA's mines and mills in South America, Africa, Canada and the U. S. A., are coming increasing supplies of chromium, vanadium, silicon, and other ores for ferro alloys to help the steelmaker meet the exacting demands of industry.



Vanadium Corporation's plant at Graham, W. Va., provides America's great steel industry with important supplies of ferro-chromium, ferrosilicon, metallic silicon and other similar products.



High speeds and high temperatures of high-flying jets demand special properties which Vanadium Corporation supplies with titanium, chromium, and other alloys for use in critical parts.



Modern trains are comfortable to ride, economical to run, thanks to strong, light, corrosion-resistant stainless steel. Stainless is one of many steels made with Vancoram ferro alloys.

VANADIUM CORPORATION OF AMERICA

420 Lexington Avenue, New York 17, N. Y.

Pittsburgh • Chicago • Detroit • Cleveland

PLANTS—Niagara Falls, N. Y.; Graham, W. Va.; Cambridge, Ohio; Durango and Naturita, Colo.

RESEARCH CENTER—Cambridge, Ohio

MINES—South America, Southern Rhodesia, Canada, U.S.A.



Producers of alloys, metals and chemicals

BUSINESS ABROAD

Guiding Foreign Policy

Pres. Eisenhower this week has an important new member on his White House team—Special Assistant Nelson A. Rockefeller (picture), who will advise the President on all angles of U.S. foreign policy.



Nelson Rockefeller

Rockefeller takes over the post vacated last spring by C. D. Jackson of New York. But his duties will be much broader than those assigned to Jackson, who specialized in psychological warfare.

Rockefeller is to be in foreign affairs what Eisenhower's assistant, Sherman Adams, is in domestic. He is responsible for the whole field of foreign policy—political, military, economic, and propaganda. In this capacity, he attends meetings of the Cabinet, the National Security Council, the Operations Coordinating Board (psychological warfare), and the new Council on Foreign Economic Policy, which is headed by Joseph M. Dodge (BW—Dec. 18 '54, p. 28).

• **Significance**—The Rockefeller appointment has real significance from at least two angles:

• After two years in office, Eisenhower is assuming more and more responsibility for the direction of U.S. foreign policy. The Dodge appointment gave him direct control over foreign economic policy including aid, trade, foreign investment, lending, technical assistance, and overseas disposal of farm surpluses. Now Rockefeller becomes the President's eyes and ears in the whole foreign policy field. His responsibility for keeping the President informed is even wider than that which Secy. of State John Foster Dulles has. And he'll have to keep policy lines straight, as between depart-

ments such as State, Treasury, Defense.

• **The appointment fits right into** Eisenhower's new policy of competitive coexistence and the new White House emphasis on winning the East-West struggle via economic development in the underdeveloped countries, especially in Asia. To put this development policy on a realistic basis and to keep it in balance with military and diplomatic needs, Eisenhower felt that he needed someone like Rockefeller in the White House.

• **Experienced**—The fact is that Rockefeller, at 45, is well qualified to help the President on both counts. He has had wide experience, both governmental and private, in the foreign field. Pres. Roosevelt made him Coordinator of Inter-American Affairs in 1940 and Assistant Secy. of State for Inter-American Affairs in 1944.

Since World War II, he has been active as a partner in the economic

development work that the Rockefeller brothers have carried out in Latin America. On top of that, he has participated in various postwar committees and commissions working on government reorganization. Until he took on his new job last week, he was Under Secy. of the Health, Education & Welfare Dept.

• **Full-Time Job**—Rockefeller will have his hands full with this White House assignment. He will have to coordinate the various aspects of U.S. foreign policy for the President. He'll be expected to act as a trouble shooter abroad. For example, he may well get involved in the delicate negotiations that will go on before a new economic development program for Asia can get under way. Still, he has enough interest and experience in this field to tackle it without any qualms.

In a highly personalized job such as the one Rockefeller is taking over, the man really makes the job. So the importance of his role in making U.S. foreign policy will depend as much as anything on how he measures up.

Toning Down "Buy American"

New policy smiles on foreign products . . . Swedish tycoon Wenner-Gren eyes Venezuela . . . More foreign securities on U.S. exchanges . . . Fillip for Filipinos.

Businessmen vying with foreign suppliers for government contracts can expect hotter competition than ever before. Pres. Eisenhower has ordered all agencies to slash the price preference they give to U.S. bidders under the Buy American Act.

The move is sure to increase Washington's buying abroad, and will remove a main source of friction between the U.S. and its major trading allies. But it will bring louder protests from domestic manufacturers.

For the first time since Buy American was enacted in 1933, there is a standard procedure for all federal agencies. Instead of the 25% rule (U.S. bidders get the order unless they are 25% or more above foreign bids) the price preference is now either 6% or 10%, depending on whether tariffs and other charges are added to the foreign base bid before or after calculating the Buy American differential.

In practice, the spread will work out to around 10% in most cases. Thus an American supplier whose price is 10% or more above the lowest foreign bid will, in principle, lose out.

But there are some loopholes—con-

cessions to U.S. bidders. Agencies will be permitted to place a "fair proportion" of their orders with small business in the U.S. Foreign bids can be rejected for security reasons. U.S. bidders can get the nod if surplus labor areas are involved. But if the 10% rule is waived, agency heads must explain in writing to the President.

The new order came after long, behind-the-scenes debate. Eisenhower set out last March to liberalize Buy American. The Cabinet had many indecisive discussions; there were some technical changes in procedure, but they didn't change the competitive position (BW—Oct. 16 '54, p. 27). The President was on the verge of announcing the new policy last month when howls from domestic producers caused a delay. But the White House stuck by its guns. Most observers expect the President to push just as hard for the rest of his trade liberalization program.

• After he bought heavily into the Ruhr steel industry (BW—Oct. 23 '54, p. 150), 73-year-old Swedish tycoon Axel Wenner-Gren told friends he was ready



Early installation of a "moving belt"—linked tables on wheels (about 1890)

Improved efficiency depends on modern materials

You're keeping competitive with up-to-date equipment. Are you taking full advantage of modern materials? In every branch of industry new basic materials—like special alloy steel, plastics, and man-made fibers—are making possible lower costs . . . increased efficiency. **Du Pont's man-made fibers** may well help you improve a product or a process . . . even if you've never used fibers before. For chem-

ists have built into these fibers an amazing range of properties . . . like strength with little stretch . . . shock absorbency . . . acid resistance . . . for doing a variety of jobs better than they've ever been done.

It will pay you to find out more about the properties and applications of each of these versatile fibers. Send for your copy of a booklet that shows how you can

use Du Pont fibers as cost-cutting basic materials. Write to: E. I. du Pont de Nemours & Co. (Inc.), Textile Fibers Dept., Section B, Wilmington 98, Delaware.



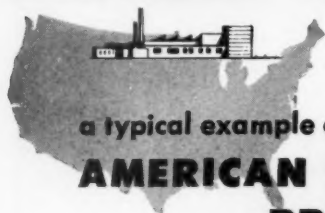
BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

DU PONT FIBERS: *new basic materials for industry*

NYLON • **CORDURA*** • **ORLON*** • **DACRON***
high-tenacity rayon acrylic fiber polyester fiber

*REG. U. S. PAT. OFF.

NICHOLSON FILE COMPANY IN HOLLAND...



a typical example of how

AMERICAN INDUSTRY PROFITS IN THE NETHERLANDS



"The Netherlands was our unanimous selection," says Mr. Paul C. Nicholson, Jr., President of Nicholson File Company, Providence, Rhode Island.

"After nearly sixty years of supplying its high quality files and rasps to the discriminating tool buyers of Europe from the United States and Canada, the management of Nicholson File Company decided about a year ago that current conditions dictated the establishment of a manufacturing operation overseas. A careful analysis was made of every logical European country prior to the final choice. The Netherlands was our unanimous selection.

"The reasons were numerous and compelling. The co-operative attitude of the Dutch Government, backed up by the political and economic stability of that great trading nation, facilitated our problem from the very start. Such advantages as a favorable depreciation program, the opportunity to repatriate capital under excellent terms, and absence of a limit on transfer of net profits to the parent company were all strong financial attractions. Low manufacturing costs, good productivity, and the fine reputation which Dutch-made goods enjoy in all foreign markets constituted others.

"Now that we are established there, our new subsidiary, Nicholson File Nederland N. V., will soon be able to supply markets which have been closed to us in recent years because of exchange and import restrictions.

"With experience in selling files abroad for over half a century, Nicholson File Company has come to the studied and inescapable conclusion that the manufacture of our products in the Netherlands offers the best opportunity for providing its customers throughout Europe with Nicholson quality files at competitive prices."

Literature containing answers to all major questions pertaining to establishment of American industry in Holland is available on request.

**NETHERLANDS
INDUSTRIAL INSTITUTE**



Offices: New York City — The Biltmore, 1-M-Q, Room 48, LExington 2-5069
Chicago — 111 W. Washington St., Suite 1045-Q, DEarborn 2-2013

to quit the international financing business. But now, it seems, he is at it again.

Wenner-Gren interests recently bought out two of the largest flour milling operations in Sweden. Now technicians from the plants are en route to Caracas from Stockholm, where Wenner-Gren and Venezuelan government and private business people have worked up plans for one of Latin America's largest flour mills. It would go up at Puerto Cabello, require close to \$3-million worth of machinery, turn out some 200 tons a day.

Another foreign business saw its shares listed on the American Stock Exchange last week. For 1955, expect more foreign listings—certainly more talk about them—on both New York security exchanges.

The newcomer is Peruvian Oils & Minerals Ltd., Toronto. Incorporated in Canada, the company holds several million acres of exploratory concessions along Peru's coastal desert and across the Andes in the Oriente area. It's the first Peruvian business listed in the U. S. market.

Last summer brought Royal Dutch Petroleum Co. to the New York Stock Exchange; the coming year may see another corporate behemoth from the Netherlands admitted to trading. For months, Big Board officials have been chatting with Unilever N. V., the Dutch half of the giant Unilever empire (total sales of \$3.7-billion, supplying, among other things, 40% of the world's margarine). Outsiders don't believe listing will come soon—there are many roadblocks. But 1955 could be the year.

Meanwhile, there was a suggestion from Johannesburg over the weekend that South African mining shares should be listed in the U. S. S. G. Menell, chairman of Anglo-Transvaal Investment Co., believes the U. S. investing public "is ready" to turn its attention to certain gold and uranium shares—which, he insists, present a "picture of stability and reliability."

A new Philippine-U. S. trade pact was signed last week. It should provide a boost for the islands' lagging economy, and a filip to Filipino national pride.

Washington's tough, elder brother approach to Filipino trade relations is now a thing of the past. Now Manila will have full control of its currency, and the right to alter the two pesos-to-the-dollar ratio. Filipinos can now step up the tariff rate on U. S. goods, and receive reciprocity in certain investment rights that Americans had held in the islands, but that Fili-

busi-
at it
cently
flour
Now
route
where
overn-
have
Latin
would
close
turn

w its
k Ex-
spect
more
York

ils &
erated
several
ssions
across
s the
the

Dutch
Stock
y see
a the
For
been
the
em-
apply-
f the
t be-
e are
ld be

estion
ekend
shares
S. G.
nsval
S. in
m its
mium
nt a
y."

pact
vide
econ-
tional

other
tions
Ma-
cur-
two
s can
U.S.
cer-
icans
Fili-

1954

pinos did not enjoy in the U.S.
In exchange, Manila will give up its 17% tax on dollar remittances of peso earnings, and reinforce its pledges of no discrimination against U.S. goods, companies, or citizens.

BUSINESS ABROAD BRIEFS

B. F. Goodrich Co. looks to expanding business abroad. The Akron manufacturer hopes to build a \$6-million tire factory near Manila, the first major tire and tube plant in the Philippines. In October, Goodrich announced it would grow its own rubber—for the first time—in Liberia.

If you're interested in Latin America—and four sunny days in New Orleans—check into the first Inter-American Investment Conference, slated for Feb. 28. New Orleans city fathers and Time-Life International are sponsoring the meeting; business and government people from the U.S. and many American republics will gather to hash over investment problems.

It's officially "BP" now. Anglo-Iranian Oil Co. stockholders voted to change the company name to British Petroleum Co., Ltd. There's to be a four-for-one stock split, and (according to Chmn. Sir William Fraser) fatter dividends are probable.

Hands across the border: The National Industrial Conference Board has set up an office in Montreal, plans to develop research services in Canada similar to those in the U.S. . . . Boosters of a full-fledged "Canada House" in New York City—as a showplace and headquarters for Canadian business and social groups—hope to decide on financing and a site early in 1955. The Grand Central area is a good bet.

The Germans: Burma and the Ruhr firm of DEMAG have agreed on terms for a scrap-converting steel mill (16,000 tons annually) that the Germans will build at Rangoon. Krupp is negotiating a contract for four ore preparation plants for Bolivia's tungsten mines. In Pakistan, Krupp executives are drawing up final blueprints for a 50,000-ton steel plant.

The Finns have called the hand of three Western oil companies operating in Finland. Parliament has O.K.'d plans to build a government-owned refinery (BW—Dec. 11 '54, p111). Helsinki officials say Esso Standard, Gulf, and Shell won't go through with what Finns call "threats" to stop operating there if the refinery is built.

PROGRESS REPORT

ON HOLLAND . . .



In 1954, these leading

AMERICAN INDUSTRIES

FOLLOWED THE TREND

TO THE NETHERLANDS



In 1954, 14 American businesses chose the Netherlands as their overseas base of manufacturing and selling operations, among which are these leading companies:

Aircraft Marine Products Inc. • A. P. Controls Corp. • The Borden Co. • The Dobeckmun Co. • Fairchild Camera & Instrument Corp. • Friden Calculating Machine Co., Inc. • The Lummus Co. • Merck, Sharp & Dohme International • Nicholson File Co. • The Pyramid Rubber Company • Texas Instrument Inc. • The Watson-Stillman Co.

These companies, with diverse products and services, diverse markets and sales objectives, followed the lead of 23 American concerns who since 1947 have established their own facilities in the Netherlands.

Historically one of the world's great export countries, Holland offers industry a singular combination of advantages—good productivity at low cost . . . social and political stability . . . transferability of profits and freedom to retransfer investments . . . freedom of management to set policy and assign personnel . . . easy access to world markets.

On the opposite page, Mr. Paul C. Nicholson, Jr., President of Nicholson File Co., summarizes the reasons that impelled his company to select Holland as the site of its new subsidiary. These reasons merit serious study by any business in which the maintenance of export volume in non-dollar areas is a problem.

Literature and consultation regarding industrial possibilities in Holland are at your disposal. Write or phone our New York or Chicago offices.

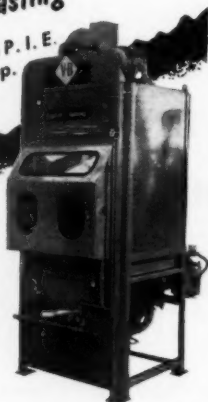


**NETHERLANDS
INDUSTRIAL INSTITUTE**

Offices: New York City—The Biltmore, 1-M-P, Room 48, LExington 2-5069
Chicago—111 W. Washington St., Suite 1045-P, DEarborn 2-2013

**"Saved Hours of
Diesel Engine Overhaul
with 60 Minutes of
Vapor Blasting"**

Report from P. I. E.
Denver Shop.



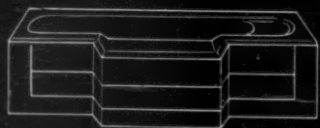
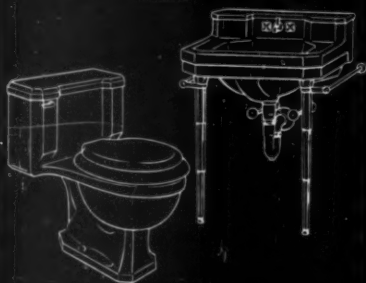
This report is only one of the countless in which Vapor Blast Liquid Honing machines are saving money and speeding production for industry.

Read how you can use this machine and its process in the big free Executive Report #453. Write and also have us tell you of our Preproof Research Laboratory Service.



**VAPOR BLAST
MFG. CO.**
3043 W. ATKINSON AVE.
MILWAUKEE 16, WIS.

**Plumbing fixtures
for every home, commercial
and institutional use**



CAST IRON • FORMED STEEL • VITREOUS CHINA • BRASS

ELJER

A subsidiary of the HUBBARD Corporation of America

LABOR

No Antitrust Drive on Unions

For now, anyway. A Justice Dept. committee is weighing new laws, and amendments to existing laws, to restrain union abuses without invoking the Sherman Act.

Organized labor has won a new reprieve from the federal antitrust laws. But it may be restrained by other legal curbs if the Eisenhower Administration adopts the recommendations of a top-level professional committee.

Last week, in a super-secret session, a government-sponsored committee of 61 lawyers and economists voted in favor of continuing union exemptions from the restraints of the Sherman Act. At the same time, they noted "abuses" by powerful unions that need correcting.

The report is earmarked for the desk of Atty. Gen. Herbert Brownell, who appointed the group. First, however, it must undergo the scrutiny and penciling of wordwise experts, who may take months to phrase the recommendations precisely. So the results of the study probably will not show up in federal action during 1955.

• **Point for Labor**—The significance, at this time, is the basic decision in favor of labor. It also represents a philosophic victory for Labor Secy. James P. Mitchell, the Administration's exponent of continued exemption for unions, over Commerce Secy. Sinclair Weeks, who wanted the antitrust curbs applied to wipe out secondary boycotts, featherbedding, and the like.

Paradoxically, Mitchell's viewpoint prevailed although he was not represented on the special committee, while Weeks was a highly vocal member. Final decision was delayed for many months, while the committee weighed the Commerce Dept.'s 27-page "indictment" of union actions.

Weeks's memorandum pinpointed labor's nonbargaining activities—restrictions on production, price-fixing, refusal to use job-eliminating technological improvements—effectively enough to convince the committee of the need for new legal checkreins. But the committee decided that one of the answers was to use the Taft-Hartley Act.

• **Pulling and Hauling**—In its preliminary action, the committee did not recommend which existing laws should be used or what new legislation should be written. It simply affirmed the need for additional restrictions. To that extent, Weeks's point of view carried weight. Presumably, Weeks

would back any concrete action that would accomplish his goal.

However, the final report will largely bear the stamp of Mitchell, who was anything but reticent about his position, despite his noncommittee status. Mitchell contends that the solution to any labor abuses can be found in amending laws now on the books.

• **Debate Goes On**—The report won't end the running debate on unions and antitrust. Arthur Goldberg, CIO general counsel, has predicted an intensified drive by management to extend the Sherman Act to labor.

Incidentally, Goldberg had words recently with the co-chairmen of the Brownell committee: S. Chesterfield Oppenheim, Michigan University law professor, and Stanley N. Barnes, Assistant Atty. Gen. in charge of the antitrust division. During the committee meetings, Goldberg wrote to Oppenheim that unions were not represented on the committee, and Oppenheim replied with a request for Goldberg's viewpoint on the issue. The CIO counsel refused to submit a report because CIO wasn't represented on the committee.

Oppenheim and Barnes are now saddled with putting the committee position on paper. This report will be reviewed by all the members and put in final form for the Attorney General. This leaves the way open for changes, but the basic position will most likely remain the same.

• **Antitrust**—Weeks's main contention against using Taft-Hartley is that the law was designed primarily to promote collective bargaining—that the restraints have to come from somewhere else. He counters labor's assertion that the antitrust law could be used for union busting with the claim that legitimate union activities, such as strikes or direct boycotts, could be spelled out as permissible even when the effect is to restrain trade.

Goldberg counters that unions who conspire with employers to limit trade are already subject to the Sherman Act. He denies that his group, or the AFL, have ever sought to interfere with the sale of goods or to create a monopoly in commodity markets.

• **Sherman Act**—The Sherman Act has been used against unions for boycott-

INTERNATIONAL ROADLINER® Model CO-195
with sleeper cab of new counterbalanced design that
swings forward for maximum service accessibility.
GCW rating, 50,000 lbs. Wheelbases, 99 and 111 in.



**FIRST CHOICE
OF
HEAVY-DUTY
OPERATORS
FOR**

23

**STRAIGHT
YEARS!**

There are good reasons why **INTERNATIONAL** has been the heavy-duty sales leader for more than two decades.

First, **INTERNATIONALS** are Tough-Job engineered. They work long and dependably at lowest cost, as operators' records prove.

Second, **INTERNATIONAL** constantly develops new models and features and puts them into production as soon as they are tested and proved—to give new buyers still further operating economies. In today's **INTERNATIONAL** line you'll find the answer to every highway transport need in the newest, most efficient trucks on the road.

Your **INTERNATIONAL** Dealer or Branch will be glad to work with you to determine the **ROADLINER** model or models *exactly right* for your job. Make a date to get the money-saving facts—today.

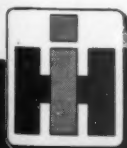
INTERNATIONAL HARVESTER COMPANY • CHICAGO

America's Finest Tractor-Trucks

Twenty-three basic **ROADLINER** models. Conventional and cab-over-engine, 4-wheel and 6-wheel designs. Regular, space-saver, and sleeper Comfo-Vision cabs. GCW ratings from 29,000 to 76,800 pounds. Widest choice of gasoline, LPG, or diesel power. Transmissions and axle ratios for every requirement. Thousands of chassis variations for exact job specialization.

International Harvester Builds **McCORMICK®** Farm Equipment and **FARMALL®** Tractors...Motor Trucks...Industrial Power...Refrigerators and Freezers

See the season's new TV hit, "The Halls of Ivy," with Ronald Colman and Benita Hume, Tuesdays, CBS-TV, 8:30 p.m., EST



INTERNATIONAL TRUCKS

Standard of the Highway

1600% TURNOVER IN A GRAIN ELEVATOR



At left: Federal Pacific Low Impedance Bus Duct Feeders out of Distribution Switchboard... Electrical construction by Fischbach & Moore, Inc., Victory Electric Works, New Orleans. General Contractor, Fegles Construction Co., Inc., Minneapolis. Engineers, Jones-Hettelsater Co., Kansas City.

THE RECENTLY COMPLETED New Orleans Public Grain Elevator has storage capacity of 5-million bushels, but handles grain at the rate of 83 million bushels per year. This huge 1600% turnover requires an extensive "hazardous location" electrical system... to which all electrical energy is distributed by Federal Pacific equipment.

Design and engineering leadership

Federal Pacific's spectacular growth as a manufacturer of a complete line of electrical distribution and control equipment from 110 to 300,000 volts is primarily the result of advanced engineering and design. Almost continuously in the last few years, Federal Pacific has introduced new devices and outstanding improvements that have out-moded former equipment and vastly simplified installation and maintenance.

Ten plants from coast to coast

The ever-increasing demand for Federal Pacific products has been met by the successive acquisition of existing plants and the erection of new ones. Today ten plants, ideally located to serve the nation's electrical industry, are in full swing and manufacturing facilities are being still further expanded.



FEDERAL PACIFIC ELECTRIC CO.

Formerly Federal Electric Products Co.
and Pacific Electric Manufacturing Corp.

Main Office: 50 PARIS STREET, NEWARK 1, N. J.



Plants at Newark, N. J.; Long Island City, N. Y.; Hartford, Conn.; Cleveland, Ohio; St. Louis, Mo.; Dallas County, Texas; Scranton, Pa.; Los Angeles, Calif.; San Francisco, Calif.; Santa Clara, Calif.
Affiliated plant, Toronto, Canada

ting an employer's product, but that was back at the turn of the century. The 1914 Clayton Act, followed up later by the Norris-LaGuardia anti-injunction act, gave labor its immunity, backed up by Supreme Court decisions. For the Sherman Act to be applicable to unions now, it must be shown that the unions are in direct conspiracy with an employer.

The agitation to cancel labor's Sherman Act exemption has provided more talk than any other action in recent years. The last time the issue reached Congress in the form of specific legislation was almost 10 years ago, in the 80th Congress. Since then, there have been attempts to ban union monopoly tactics through Taft-Hartley, but these too have failed. If another try comes from the Eisenhower Administration, it will probably follow the same Taft-Hartley pattern.

Union Concession Fails To Halt Rice-Stix Sale

Union concessions valued at \$850,000 in labor costs over the next three years failed to stop the sale of Rice-Stix, Inc., St. Louis clothing maker, to a competitor, Reliance Mfg. Co., of New York. The principal family owners of closely held Rice-Stix last week agreed reluctantly to sell their common stock to avoid what they said would be "a bitter proxy fight."

• **Concessions**—Rice-Stix Local 688 of the Brotherhood of Teamsters (AFL) agreed on Thanksgiving Day to give up 44¢ in hourly raises due over the next three years, to help a friendly management in its fight against Reliance (BW—Dec. 4 '54, p118).

Ernest W. Stix, president, and Fred B. Eiseman, senior vice-president, told shareholders of the labor concession and promised to reduce operating costs. At the same time, they said that they would not sell their stock to Reliance.

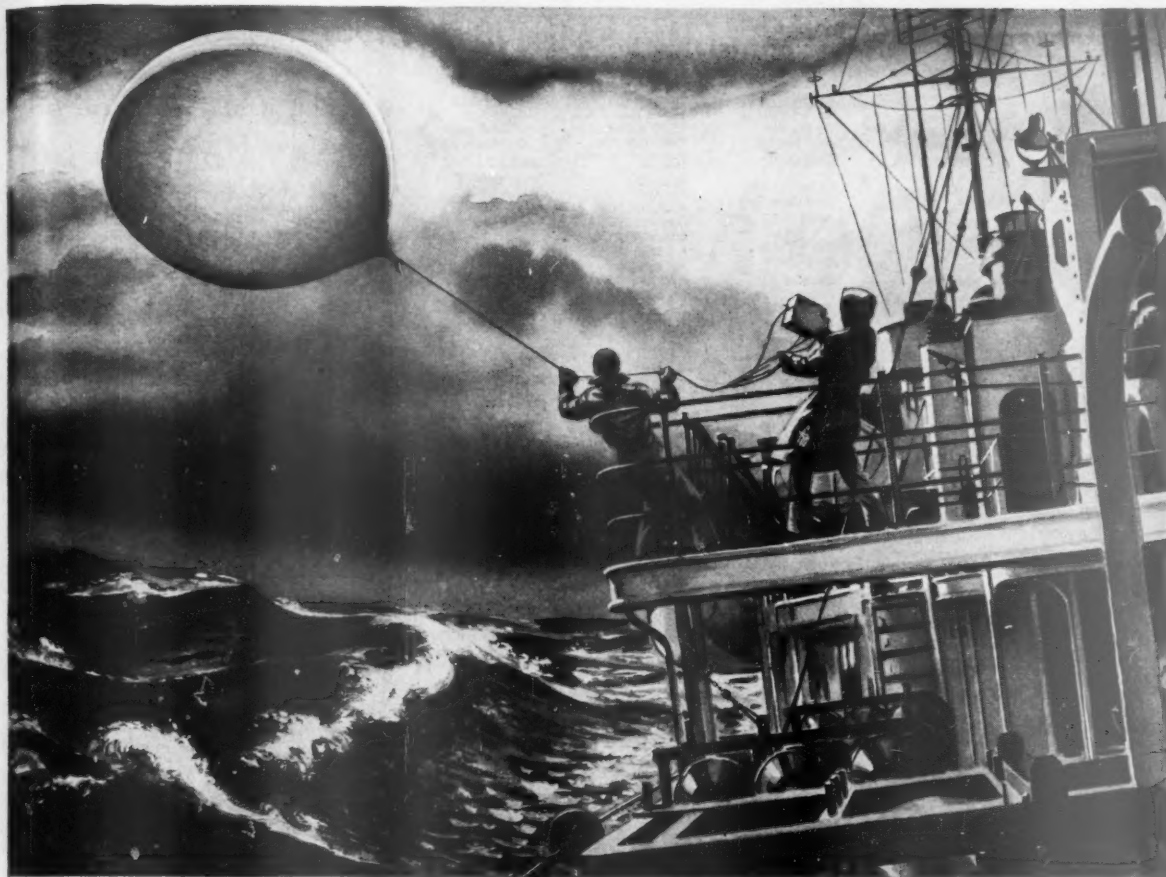
• **Change of Mind**—Last week, however, the Rice-Stix management decided to sell. Spokesmen explained that Stix and Eiseman had decided that Reliance already controlled enough stock to force a proxy battle.

Maurice M. Clairmont, board chairman of Reliance, assured Local 688 that Reliance (1) has no intention of liquidating Rice-Stix; (2) expects to operate with "essentially the same management"; and (3) appreciates the "reasonable attitude" of Local 688, and hopes for continued amicable relations.

The assurances haven't done much to cheer Local 688, which still suspects that Rice-Stix operations will eventually be shut down or sharply curtailed. But, the local announced that it "made a deal and will live with it."



products . . . keyed to basic human needs



Taking the pulse of a storm ... to help keep your business healthy!

Advance warnings of violent weather have value beyond reckoning. Personnel can be alerted, property damage minimized, inventory and equipment saved. To make such warnings possible, observers in hundreds of world-scattered weather stations keep 24-hour watch on the constant surge of changes in the upper air.

DAREX Meteorological Balloons, produced by Dewey and Almy, are essential tools in this work. Carrying radio transmitting equipment, these balloons may soar as high as 25 miles up to "take the pulse" of an

advancing storm. They're subjected to raging winds, fierce heat, bitter cold. Yet at working altitudes their "skin" is thinner than the paper this is printed on!

The chemical and mechanical know-how that enables Dewey and Almy to mass-produce these giant balloons may be helpful to your business. Among the Dewey and Almy products, below, perhaps there is one that will help you improve your products, solve a merchandising problem, or reduce production costs. Why not investigate today?



DEWEY and ALMY

Chemical Company

DIVISION OF W. R. GRACE & CO.

Cambridge 40, Massachusetts

Offices or Subsidiaries in principal U. S. cities and in Buenos Aires, Copenhagen, London, Melbourne, Milan, Montevideo, Montreal, Naples, Paris, São Paulo, Tokyo.
Shoe Materials • Sealing Compounds for Food Cans • Resin Adhesives • CRYOVAC bags for Food Packaging • Soda Lime • Flowed-in Gaskets for Industry • Battery Separators • Chemical Products for the Construction Industry • Meteorological Balloons • Textile Printing Products • Organic Chemicals



Call Your Nearest Representative for VIKING PUMP SALES and SERVICE

AMARILLO, TEXAS
Wallborn Bros. Co.
101-13 Houston St.
Phone 2-4311

ATLANTA 151
C. W. Downing
1214 Spring St. N.W.
Phone Vernon 9065

BALTIMORE 151
Walter H. Egan Co., Inc.
237 President Street
Phone Lexington 9-1942

BIRMINGHAM 5
Pump Shop, Inc.
1015 7th Avenue S.
Phone 3-3206

BOSTON
Gruva City Steel
4000 Warm Springs Ave.
Phone 6377

BOSTON (SUBURB)
ROCKFORD, ILL.
Hayes Pump & Mach. Co.
100 Vine Street
Phone Monument 6-3880

BUFFALO 10 151
Root, Heal & Company
64 Peabody Street
Phone Fairview 6400

CHARLOTTE, N.C. 151
Southern Pump and Tank Co.
1730 No. Tryon Street
Phone 4-8671

CHICAGO 4 151
C. W. Dennis
549 W. Washington Blvd.
Phone State 2-4810

STOCK 151

CINCINNATI 2 151
Wm. T. Johnston Co.
214 Vine Street
Phone Main 3232

CLEVELAND 13
J. A. Sinden
310 Marshall Blvd.
Phone Cherry 1-0687

DALLAS 22 151
O. W. Phillips
2175 W. Commerce St.
Phone Randolph 3630

DENVER 14 151
Eaton Metal Products Co.
4800 York Street
Phone Taber 7205
Also Albuquerque, Casper,
Billings and Omaha

DENVER 17 151
Hendrie-Balshoff Co.
1435 17th Street
Phone Keystone 4111

DETROIT 26 151
Kerr Machinery Co.
Kerr Building
1300 Woodward 1-0590

EL PASO, TEXAS
G. S. Thompson Co.
611 N. Campbell Street
Phone 3-4471

EVANSVILLE, IND.
Shouse-Brill Machinery Co.
222 Court Building
Phone 5-2401

HOBBS, NEW MEXICO 151
Union Supply Company, Inc.
Phone 3-3183
Also Artesia, New Mexico

HOUSTON 1 151
Southern Engine & Pump Co.
900-910 St. Charles Street
Phone Capitol 9276

INDIANAPOLIS 25 151
C. D. Sadler
407 Madison Avenue
Phone Melrose 5-8349

KANSAS CITY 8
F. J. Pinney
1907 Main Street
Phone Harrison 8033

LOS ANGELES 54 151
E. E. Burton
4432 Long Beach Avenue
Phone Adams 3-8165

LOUISVILLE 3 151
Neill Lavielle Supply Co.
505 W. Main Street
Phone Anchor 1841

MAKESFIELD, WIS. 151
Folker Bros. Mfg. Co.
Phone 230

MEMPHIS 3 151
E. C. Blackstone Co.
400 Madison Avenue
Phone 8-2191

MILWAUKEE 3
C. F. Mullens
610 West Michigan St.
Phone Broadway 6-0007

MINNEAPOLIS 3
Reed Hart
111 East 16th St.
Phone Bridgeport 7582

NEW ORLEANS 12 151
Henge Pump & Machinery Co.
549 Dryades Street
Phone Canal 4851

NEW YORK 36 151
Herbert Fuhrer
634 W. 44th Street
Phone Longacre 3-3816

ODessa, TEXAS 151
W. L. Sommer Co., Inc.
P. O. Box 1626
Phone 4-4379

PHILADELPHIA 30 151
Walter H. Egan Co., Inc.
2336-38 Fairmount Avenue
Phone Stevensen 7-2300

PITTSBURGH 22
Power Equipment Co.
Oliver Building
Phone Atlantic 6390

RICHMOND
O'Neill Pump
& Engineering Co.
601 E. Franklin Street
Phone 7-4039

ST. LOUIS 1
Lane Machinery Co.
7th & Market Streets
Phone Central 1-0011

SALT LAKE CITY 1
Utility Engineers, Inc.
630 Duoly Bldg.
Phone 3-4682

SAN FRANCISCO 5 151
DeLaval Pacific Co.
61 Beale Street
Phone Sutter 1-8846
Also Seattle and Portland

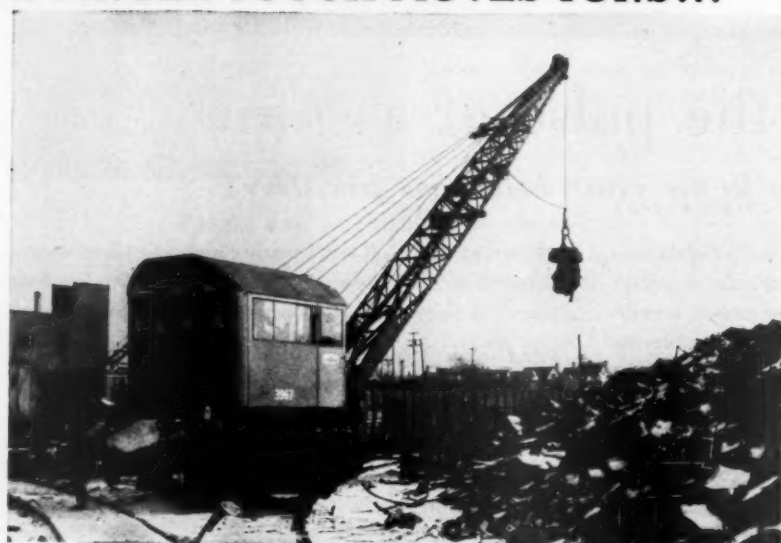
TULSA 3 151
Miller Equipment Co.
5004 E. 11th St.
Phone 9-4301

VIKING PUMP COMPANY

CEDAR FALLS, IOWA

See Our
Catalog in
SWEETS

A FINGER-TOUCH MOVES TONS...



All motions of the Wellman-Browning Locomotive Crane—hoist, swing and travel—are smoother because of finger-tip controls and exclusive Torqflo hydraulic drive. This crane works faster; it has greater switching power. You cut costs! Write for details. The Wellman Engineering Company, 7018 Central Avenue, Cleveland 4, Ohio.

WELLMAN

ENGINEERING COMPANY-CLEVELAND

HEAVY MATERIALS HANDLING EQUIPMENT
SPECIAL STEEL MILL MACHINERY
"WILLIAMS" CLAMSHELL BUCKETS
MECHANICAL GAS PRODUCERS
"ANKER-HOLTH" AIR AND HYDRAULIC CYLINDERS
WELLMAN-BROWNING LOCOMOTIVE CRANES

Facing a Split...

... with Beeson about to leave, NLRB worked fast while it still had use of his decisive fifth vote.

Albert C. Beeson, appointed to the National Labor Relations Board early this year to fill an unexpired term, leaves the board this weekend—and NLRB will be split down the middle with two Democrats and two Republicans.

In 1953, the even division in the board between holdover Democrats and Republican appointees caused a stalemate that continued for months on some 20 controversial cases. Concerned over the possibility that such a situation might come up again (a quick appointment of a Beeson successor now appears unlikely), the board hurriedly turned out a number of important decisions to take last advantage of the decisive fifth vote.

As happened frequently in the past, votes weren't uniformly on party lines as NLRB wrote these decisions:

Hot cargo. A majority vote of Eisenhower-appointed Chmn. Guy Farmer and Democratic-appointed Abe Murock and Ivar Peterson reaffirmed the legality of "hot cargo" contracts between employers and unions. These contracts let workers refuse to handle goods the union labels "unfair." The decision said that as long as an employer agrees, employees can decline to handle goods of a strikebound secondary employer—an act the minority says is strictly contrary to the ban on secondary boycotts of the Taft-Hartley law.

While one split vote held that the contract clauses as such are legal, Farmer and GOP appointees Philip Ray Rodgers and Beeson ruled in the case at hand that the AFL Teamsters violated T-H by trying to force McAllister Trucking Co. into a hot cargo agreement. To be legal, such an agreement must be voluntarily accepted by management.

The Teamsters, who have used the hot cargo clause as a favorite organizing device in the trucking industry, got an O.K. for continuing this bargaining maneuver. But employers, under the majority viewpoint, may sign up but then reject the clause's application. T-H bans as an illegal secondary boycott any union pressure to prevent its members from handling goods of a neutral employer.

Representation. The board overturned a three-year ruling that a union, after it has lost a representation election, may still pursue a refusal-to-ba-

gain charge instituted against an employer prior to the outcome. From now on, a union that claims an employer refused to bargain must complete its case while it is still officially the workers' bargaining agent. If an election is held and the union loses, the charge cannot be re-instituted as in the past.

Partial strike. A one-day walkout is grounds for an employer to refuse to bargain with a union, according to a three-man majority. Dissenters Murdock and Peterson reaffirmed a former board position that partial strikes should be protected activity under Taft-Hartley.

Jurisdiction. A three-two decision split, with Beeson joining Murdock and Peterson, held the board should take jurisdiction over government defense work performed by non-profit institutions. In this case, NLRB took over a dispute at a federal-subsidized research project at the Massachusetts Institute of Technology.

Maritime affairs. In its only unanimous ruling, NLRB ordered an election for all employees of the West Coast Pacific Maritime Assn. This action hits at the stronghold of left-wing International Longshoremen's & Warehousemen's Union leader Harry Bridges, who sought to split the election among the current three bargaining units.

LABOR BRIEFS

A Christmas bonus of a week and a half's pay, to start in December, 1955, is written into a new contract between Local 1031 of the International Brotherhood of Electrical Workers (AFL) and American Phenolic Corp., which employs 1,200 persons in Chicago. The bonus is in lieu of a raise.

Contract talks are under way between 60 shoe manufacturers in Eastern Massachusetts and the United Shoe Workers (CIO). The union wants a 5% pay boost for its 12,000 covered members, who got their last increase in 1952. Employers say the industry can't raise labor costs.

The cost of living rose slightly— to 114.6% of the average 1947-49 price level—in the month ended in mid-November, the Bureau of Labor Statistics announced this week. According to BLS, the 0.1% increase that reversed a three-month downtrend was due to the introduction of 1955 model automobiles. Except for that, BLS noted, its c-o-f-l index would have dropped a little. No major wage "escalator" contracts were affected by the November index change.

CARING FOR WAXED FLOORS IS...



A cinch with Sanax

It waxes as it cleans!

REDUCES THE FREQUENCY OF REFINISHING

Sanax was developed to permit frequent cleaning of waxed floors *without washing away the finish*... and to eliminate waste in wax and labor. A neutral liquid soap with a wax base, Sanax not only quickly removes dirt, oil, and grease, but *leaves a thin film of wax*. In fact, regular use of Sanax to machine-scrub or damp-mop waxed floors *actually prolongs the life of the finish*, and thereby reduces refinishing costs on a year-to-year basis. Like all Finnell Fast-Acting Cleansers, Sanax is designed for the greater speed of machine-scrubbing, and works as effectually in a *Combination Scrubber-Vac* as in a *Conventional Scrubber-Polisher*. And because Sanax is processed from pure vegetable oils, it's *safe for all floors*.

Find out how you can simplify and reduce the cost of caring for waxed floors. *There's a Finnell Floor Specialist nearby to help you choose the waxes and cleansers that are*

exactly right for your needs. Finnell manufactures a complete line, so you can depend on unbiased advice. In fact, Finnell makes everything for floor care!



A 100 Series General-Purpose Finnell 11, 13, 15, 18"



- A mild liquid wax-soap for machine-scrubbing or damp-mopping waxed floors
- Leaves a lustrous anti-skid protective finish
- Highly concentrated... economical to use

For consultation, demonstration, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 3812 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.

FINNELL SYSTEM, INC.

Originators of Power Scrubbing and Polishing Machines



BRANCHES IN ALL PRINCIPAL CITIES

Capital Spending Plans for 1955 . . .

Here is Good News About Business Prospects

In 1955, American industry is now planning to spend within 5 per cent of the amount it is spending this year on new plant and equipment. This is the tensely awaited result of a check-up just completed by the McGraw-Hill Department of Economics.

Hundreds of companies, by far the largest number in the eight-year history of these McGraw-Hill surveys, cooperated in the check-up. Combined, they represent 29 per cent of all industrial employment and over 60 per cent of employment in the industries where capital investment is highest. Such a broad cross section constitutes

a reliable gauge of the plans of industry as a whole.

What is the meaning of these plans, detailed by the table below, for capital investment next year? Is it good or bad news, so far as it concerns the prospect of continuing prosperity? It is to this crucial question that this editorial is addressed.

Key to Prosperity

It is not only good but very important business news that American industry plans to spend in 1955 almost as much for new plant and equipment as it is spending this year. The reason it is important is that a high level of activity in the capital goods industries is universally recognized as a particularly potent ingredient of prosperity for the nation as a whole. A dollar spent for capital goods is spent again and again for wages and materials. Its stimulating effects, called by economists multiplying effects, move through the economy in much the same way that a pebble tossed into a pond creates a widening circle of ripples. This is one reason why there is such intense business interest in the surveys of plans for capital investment.

Here are the principal reasons why the results of the McGraw-Hill survey are a good omen for continuing prosperity:

PLANS FOR CAPITAL INVESTMENT

	MILLIONS OF DOLLARS			Percent Change 1954- 1955
	1953 ACTUAL*	1954 ESTIMATED*	1955 PLANNED	
All Manufacturing	\$10,026	\$ 9,249	\$ 8,598	-7%
Petroleum Industry†	4,600	4,875	4,920	+1
Mining	506	380	311	-18
Railroads	1,312	851	769	-10
Other Transportation and Communications	2,954	2,922	2,640	-10
Electric and Gas Utilities	4,548	4,274	4,206	-2
ALL INDUSTRY	23,271	21,784	20,727	-5

*United States Department of Commerce; Chase National Bank
McGraw-Hill Department of Economics

†Petroleum refining, included under both "All Manufacturing" and
"Petroleum Industry," is included only once in the total

1. American industry is demonstrating that it does not need the stimulus of war-created shortages, or a rearmament boom, in order to maintain a very high level of capital investment.

The slight decrease now planned for 1955 will still maintain a level only about 11 percent below the all-time peak attained in 1953 under the stimulus of a defense expansion boom.

2. Capital investment promises not merely to stabilize at a high level, but actually to increase as 1955 goes on and thus give renewed stimulus to business.

The level of investment now planned for 1955 by industry — manufacturing, petroleum, mining, transportation, communications and utilities — is within 5 per cent of 1954. Contract awards for commercial construction — stores, office buildings, warehouses and other service establishments — as compiled by the McGraw-Hill publication *ENGINEERING NEWS-RECORD*, indicate a substantial increase in 1955. Thus total capital expenditures by all business may be very close to this year's total.

Actually, in the fourth quarter of 1954, business capital expenditures, as reported to the U. S. Department of Commerce, are down about 2.5 per cent from the average for the year as a whole. So there is a good chance that during 1955 the annual rate of capital investment will rise above this present level.

Effect of Tax Changes

The plans reported by the McGraw-Hill survey are preliminary plans, reported at the beginning of the period of business budgeting for 1955. As budgets are completed, new projects may bring the total expenditure that is planned even closer to this year's figure and thus make an even greater contribution to continuing prosperity.

But it also cannot be too strongly emphasized

that these are plans; they are not accomplished investments. As such they have the vulnerability to changed conditions that characterize any plans.

There is some indication in the results of the McGraw-Hill check-up that one change in conditions recently made by the United States government has had an important stimulating effect on plans for business investment next year. It is a liberalization of the allowances for depreciation. Apparently encouraged by this provision, most of the smaller companies are planning to maintain or increase their purchases of new equipment next year, whereas during the past three years their expenditures have been declining. This is obviously a development that strengthens our economy.

A government insensitive to the key importance of capital investment by business, both in providing prosperity and in raising our standard of living, might easily destroy the present plans. One of the easiest and surest means to do this is excessive taxation of business profits which are the key ingredient of business investment. Whether the extraordinarily constructive program recently enacted by the federal government in the field of business taxation can be sustained remains to be seen. **If it can be sustained, the remarkably cheering plans of business for capital investment in 1955 can readily become firm foundations for a continuing prosperity.**

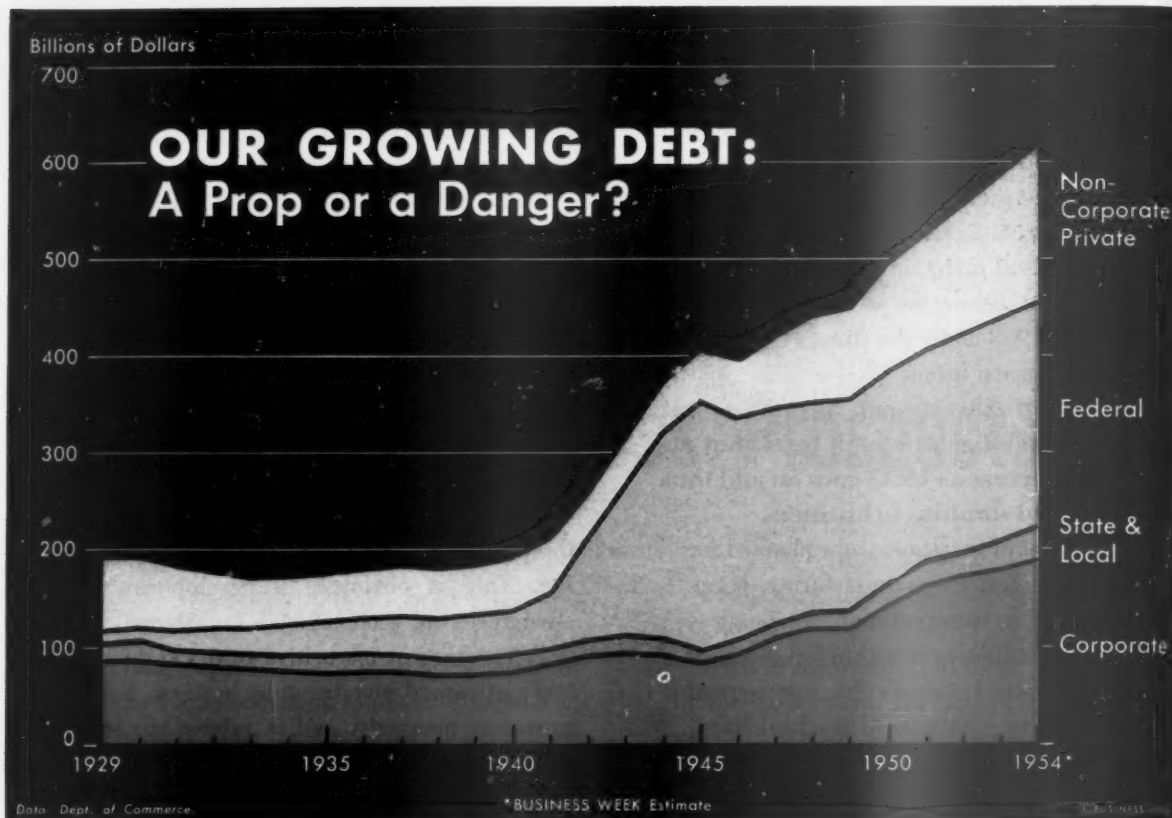
This message is one of a series prepared by the McGraw-Hill Department of Economics to help increase public knowledge and understanding of important nationwide developments that are of particular concern to the business and professional community served by our industrial and technical publications.

Permission is freely extended to newspapers, groups or individuals to quote or reprint all or parts of the text.

Donald C. McGraw

PRESIDENT

McGRAW-HILL PUBLISHING COMPANY, INC.



Another Big Jump in 1954

To a family breadwinner trying to stretch his income far enough to cover his expenses, the idea of a recession year and the thought of going deeper into debt might seem to go naturally together.

In the national economy, it hasn't usually worked that way. Take a look at earlier recession years in the chart above, and you see the debt lines leveling off or dropping back in most cases. But in 1954, in the face of a recession that was painfully felt in many sectors of the economy, both public and private borrowing continued to rise. The year's estimated \$29-billion increase in net debt will bring the total to a record-breaking \$614.5-billion figure.

In fact, the eagerness of home buyers to go ahead with mortgages helped to spark a 1954 construction boom. The willingness of consumers to maintain a heavy chunk of outstanding credit was another big factor in keeping the recession within bounds.

Here's the way the most important components of 1954's net debt total stacked up (these figures and those in the chart are for net debt, subtracting from gross federal debt government

securities held by federal funds, and from corporate and municipal debt securities held in sinking funds):

Federal debt will probably wind up the year at \$231.5-billion, after deducting the government securities held by federal agencies. That is some \$3.4-billion more than 1953—which in turn was up \$5.2-billion from 1952. With the gross public debt already nearing the temporary \$281-billion limit that expires next June, the rise in 1955 probably will be smaller.

Mortgages were the real bellwether this year—up some \$12-billion from 1953 to a total of \$103-billion for both farm and nonfarm mortgages. The building boom sparked by this new mortgage money was the brightest spot in a year with plenty of dull ones. The seers look for an even bigger jump in 1955, as the new housing act, with its even more liberal terms on Veterans Administration and Federal Housing Administration loans, provides further building incentives (BW—Nov. 27 '54, p. 27).

State and local borrowing showed the biggest percentage climb. Its probable jump of some \$6-billion to a \$34-

billion figure is about a 22% rise.

This year's heavy borrowing by political subdivisions was another prop to the economy. But there were occasional signs of indigestion in the municipal bond markets. This week, for example, municipal bond yields (which move inversely to prices) were up again to last June's levels, and Connecticut decided to delay its \$100-million of thruway bonds.

On the basis of the voters' predilection for new schools, sewers, bridges, and highways, next year should see another \$6-billion or better rise.

Corporate debt will be up at least \$8-billion in 1954 to a yearend figure of some \$187.5 billion; by the end of September the rise had already reached \$6.8-billion. Corporations seeking new funds still lean toward debt rather than equity issues. That's largely because tax laws allow writing off of interest on debt, while dividends come out of income left after all taxes are paid. Corporate debt has risen fast since 1950, and next year's rise should equal 1954's.

Installment credit, one of the stars of the postwar economy, lost a little of its luster in 1954—but not much.

Though many consumers, especially lower income groups, were fairly hard hit by loss of jobs or overtime and a cut in incomes, installment credit is winding up about where it stood a year ago, maybe even a little higher. At the end of October, outstanding consumer credit totaled \$29-billion, up \$119-million from September and \$375-million from October, 1953. If Detroit auto makers can fulfill sales expectations, and appliances hold up, 1955 consumer credit should show a sharp net rise.

• **How Heavy?**—The big question about this fast-growing debt—its annual average postwar growth has been \$30-billion—is this: How far will the national income, the net output of goods and services, support it? Total debt in 1929 was 2.2 times national income. Today it is only 1.9 times as big. But this year's recession slashed \$6.9-billion off national income, bringing it about 3% below 1953's level, while total debt kept rolling upward (though the rate of increase did slow down slightly).

One economist, Dr. Melchior Palyi, argues that our debt has grown so big that even a slowing of the rate of increase, means recession. He prophesies that the \$500-billion gross national product foreseen by Pres. Eisenhower for 1956 would mean a debt by then of \$1,000-billion.

Another well-known economist, Dr. Marcus Nadler, isn't worried. He subscribes to the view that a heavy debt volume is a vital income-generating force, and that if output is to continue to rise, "an increase in private debt is necessary."

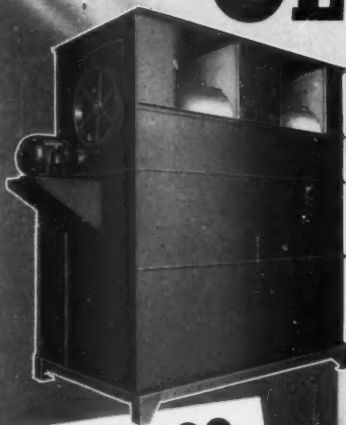
FINANCE BRIEFS

The Robert R. Young holdings of New York Central stock are way up. The Young-controlled Alleghany Corp. bought 255,400 Central shares in November, the Securities & Exchange Commission reports. Alleghany now directly owns 277,200 shares, plus a half interest in an undivided block of 600,000.

Life insurance policies sold by savings banks have reached \$800-million outstanding, says the National Assn. of Mutual Savings Banks. New policy sales for 1954 will top \$67-million.

Commonwealth Edison Co. of Chicago will soon sell \$50-million of new 50-year debentures. The proceeds will help finance the company's \$420-million, four-year construction program, which includes a scheduled \$125-million spending for 1955.

for AIR CONDITIONING EQUIPMENT...call on **CLARAGE**



97 of the 100
LARGEST CORPORATIONS
IN AMERICA USE
CLARAGE EQUIPMENT

Clarage air conditioning units, like the fans which bear this respected name in air handling, have a reputation for **DEPENDABILITY**.

They're engineered and built to provide **TOTAL**, not just first cost, economy!

You'll profit by choosing **CLARAGE** equipment for your next comfort or process air conditioning job.

CLARAGE FAN COMPANY
Kalamazoo, Michigan

This announcement is neither an offer to sell nor a solicitation of an offer to buy any of these Bonds. The offer is made only by the Prospectus.

\$30,000,000

Kingdom of Belgium

External Loan Bonds

\$5,000,000 Three Year 3½% Bonds due December 1, 1957

\$5,000,000 Four Year 3½% Bonds due December 1, 1958

\$5,000,000 Five Year 3½% Bonds due December 1, 1959

\$15,000,000 Ten Year Sinking Fund 4% Bonds due December 1, 1964

Bonds dated December 1, 1954

Interest payable June 1 and December 1 in New York City

PRICES

Three Year, Four Year and Five Year Bonds 100% and Accrued Interest
Ten Year Sinking Fund Bonds 99½% and Accrued Interest

Copies of the Prospectus may be obtained from only such of the undersigned, as may legally offer these Bonds in compliance with the securities laws of the respective States.

MORGAN STANLEY & CO.

SMITH, BARNEY & CO.

THE FIRST BOSTON CORPORATION KUNN, LOEB & CO. WHITE, WELD & CO.
BLYTH & CO., INC.

THE DOMINION SECURITIES CORPORATION
GOLDMAN, SACHS & CO. HARRIMAN RIPLEY & CO. KIDDER, PEABODY & CO.
LAZARD FRERES & CO. Incorporated
MERRILL LYNCH, PIERCE, FENNER & BEANE

SALOMON BROS. & HUTZLER STONE & WEBSTER SECURITIES CORPORATION

UNION SECURITIES CORPORATION

December 15, 1954.

Dripping grease costs you money!



You're not getting maximum efficiency or economy of operation if your materials-handling equipment leaves a slick trail of grease like this.

Bassick "3D" casters with sealed bearings eliminate these hazardous floor conditions, offer longer trouble-free service life, and eliminate maintenance problems.

Grease lost from bearings exposes them to premature wear, which increases your maintenance and repair problems. Dripping grease is also costly due to its harmful effect on floor surfaces and rubber tires.

Bassick's new "3D" sealed casters assure the sealing-in of lubricants while protecting the bearings by excluding harmful dirt, water and other foreign matter.

"3D" Caster

(No Dirt, No Drip,
No Drag)

New design
seals grease in,
keeps dirt out.



Write for Catalog Sheet 3D99-53.

Find out how "3D"
casters can cut your
maintenance costs.
THE BASSICK COM-
PANY, Bridgeport 2,
Conn. In Canada:
Belleville, Ont.



Bassick

A DIVISION OF



MAKING MORE KINDS OF CASTERS... MAKING CASTERS DO MORE

75 YEARS OF CASTER LEADERSHIP

THE MARKETS

Christmas Greetings From Wall Street: THIS YEAR'S BIG WINNERS

COMMON STOCK	1954 GAIN	COMMON STOCK	1954 GAIN
Reynolds Spring	400.0%	Kansas City Southern	88.4%
Northrup Aircraft	213.9	Goodyear Tire & Rubber	88.2
Boeing Airplane	186.5	Denver & Rio Grande	87.8
Boston & Maine	184.7	United States Gypsum	86.5
Eastern Stainless Steel	182.9	Chicago Great Western	85.1
Douglas Aircraft	173.5	Baltimore & Ohio	84.8
Filtrat Corp.	166.6	Youngstown S. & T.	84.7
Georgia-Pacific Plywood ..	163.7	Atlantic Coast Line	84.5
Magma Copper	146.5	Curtiss-Wright Corp.	83.9
Texas Gulf Producing	144.2	Daystrom, Inc.	83.6
Callahan Zinc-Lead Co.	140.0	Kelsey-Hayes Wheel	81.3
Alleghany Corp.	138.5	Glenn L. Martin Co.	80.8
Capital Airlines	133.4	United States Steel	80.7
North American Aviation ..	131.6	Seaboard Air Line	80.5
National Gypsum	128.6	Bridgeport Brass	79.0
Telautograph Corp.	126.6	Col. Broadcasting "A"	77.6
Armco Steel	116.0	B. T. Babbitt, Inc.	77.3
Penn-Dixie Cement	115.7	Amer. Rad.-Stand. San.	77.1
Bethlehem Steel	112.0	New York Omnibus	76.5
U. S. Hoffman Machinery ..	110.3	Jefferson Lake Sulphur	75.9
Certain-teed Corp.	108.0	Motorola, Inc.	75.3
Lehigh Portland Cement ..	106.4	Clark Equipment	73.6
Dresser Industries	105.3	Vick Chemical	73.4
Loke Star Cement	100.0	International Salt	73.3
Northwest Airlines	100.0	E. W. Bliss	71.3
General Dynamics	99.3	Corning Glass Works	71.2
Mead Corp.	98.2	Philip Carey Mfg.	71.0
Hammermill Paper	98.0	Anaconda Copper	70.7
Cerro de Pasco	97.5	Babcock & Wilcox	70.5
Marquette Cement	97.1	Crown Zellerbach	68.3
Lilly-Tulip Cup	95.7	Andes Copper	66.2
American Potash "B"	94.3	B. F. Goodrich	65.9
Halliburton Oil Well	94.0	Worthington Corp.	64.6
U. S. Pipe & Foundry	93.5	Ekco Products	62.5
Republic Pictures	92.3	New York Central	60.0
Wayne Pump	91.9	American Smelt. & Ref.	60.0
Western Union	91.4	Decca Records	58.5
Kaiser Aluminum	91.3	General Electric	57.9
Foster Wheeler Corp.	90.8	General Motors Corp.	56.8
Nopco Chemical	90.1	Minneapolis-Honeywell	55.0

NB. All gains figured on basis of 1953 close after adjustments when necessary to allow for stock splits and major stock dividends.



Chip Off The Block That Built America

In peace, as in war, no single industry has contributed so much to this nation's economic power and welfare as its metal producing companies. Metals and metal products form the blocks of America's very foundation. Yet, despite their vital role, metals must be sold, and many leaders in the field rely heavily on the pages of Business Week as an ideal sales tool. These manufacturers know that Business Week reaches a more highly concentrated audience of management men in business and industry—at less cost—than any other general-business or news magazine. The result: Business Week consistently carries more pages of metal and metal products advertising than any other magazine in its field.

YOU ADVERTISE IN BUSINESS WEEK WHEN
YOU WANT TO INFLUENCE MANAGEMENT MEN

BUSINESS WEEK

A MCGRAW-HILL PUBLICATION
330 WEST 42ND STREET, NEW YORK 36, N. Y.

These Advertisers of Metals and Metal Products Reach Their Major Prospects Through Business Week

Acme Steel Co.
Allegheny Ludlum Steel Corp.
Aluminum Co. of America
Anaconda Copper Mining Co.
Armco Steel Co.
Barium Steel Corp.
Bethlehem Steel Corp.
Bristol Brass Corp.
Carpenter Steel Co., The
Cold Metal Products Co.
Colorado Fuel & Iron Corp.
Continental Copper & Steel
Industries, Inc.
Crucible Steel Co. of America
Dow Chemical Co.
Eagle-Picher Co., The
Fallonsbee Steel Corp.
General Electric Co.
(Carboloy Co., Inc.)
Granite City Steel Co.
Harvey Machine Co., Inc.
(Harvey Aluminum Div.)
Ingalls Iron Works Co., The
Inland Steel Co.
International Nickel Co. of
Canada, Ltd.

Jessop Steel Co.
Jones & Laughlin Steel Corp.
Kaiser Aluminum &
Chemical Corp.
Kennametal, Inc.
Keystone Steel & Wire Co.
Lukens Steel Co.
Malayan Tin Bureau, The
Marshall Steel Co.
McLouth Steel Corp.
National Steel Corp.
Pittsburgh Steel Co.
Rem-Cru Titanium, Inc.
Republic Steel Corp.
Revere Copper & Brass, Inc.
Reynolds Metals Co.
Ryerson, Joseph T., & Son, Inc.
Sharon Steel Corp.
Timken Roller Bearing Co.
U. S. Steel Corp.
(U. S. Steel Supply Co.)
Vanadium Corp. of America
Wheeling Steel Corp.
(Wheeling Corrugated Co.)

Source: Publishers Information Bureau (Jan.-June, 1954)

Competitive edge

The company with a good system operates efficiently with least waste and has a real edge over competition. One of our customers handled bigger volume with the same staff, comfortably, using a specially designed system based on Moore Register forms. The Moore man helped engineer the improvements and had the advantage of wide Moore facilities and range of forms. Perhaps the Moore man can help you?



MOORE BUSINESS FORMS INC

Look up the Moore man in the Classified or write us at
Niagara Falls, N. Y., Denton, Tex., or Emeryville, Calif.
Over 300 offices and factories across U. S. and Canada.

C.M.B.F.

PERSONAL BUSINESS

BUSINESS WEEK

DEC. 25, 1954

A BUSINESS WEEK

SERVICE

Man has always been fascinated by heavenly signs and wonders.

The Christmas season, with its story of the Star of Bethlehem, tends to heighten his meditations on the mystery of the skies.

You will never be able to solve that mystery completely. Yet for that very reason, studying the universe can be an engrossing hobby—even if you start out not knowing the difference between a star and a planet.

That's mainly because a great body of information and knowledge, fact and theory, has been made available and comprehensible to the star-minded layman. Astronomy and its associated sciences (stellar navigation, astrophysics, meteorology, space travel) have been widely popularized since World War II.

This development goes back to the A-bomb. Since the harnessing of atomic energy, say astronomers, the basic concepts of the universe have become much sharper. One result, for example: Space travel has jumped in a few years from sheer fantasy to a clear probability.

You'll find studying the universe need be neither a difficult, nor an expensive, nor a remote hobby, no matter what phase you're interested in. Sources of information are many and varied; you'll be surprised at the number of groups, classes, societies, reference sources, and institutions devoted to furthering an amateur's particular stellar interest.

Like any hobby, however, it's important to get off on the right foot. If there's a planetarium near you, a good first step is to go to a few of its regular shows and lectures.

Don't stop there. Many planetariums offer courses in celestial navigation (which may interest all boat-owners), astronomy, meteorology, or courses in building your own telescope.

It's important to subscribe to one of the periodicals on current events. Among the best: Sky Reporter, a monthly published by Hayden Planetarium, 81st St. and Central Park West, New York 24, \$1 a year; Evening Sky Map, Shohola, Pa., \$2; Sky and Telescope (more advanced), published by Harvard College Observatory, Cambridge, Mass., \$4; and the Griffith Observer, from the Griffith Observatory, Los Angeles, Calif., \$1.50.

Start your general reading in the more popular literature, read your way gradually into more advanced material. You can get an excellent list of Books for the Layman from the Hayden Planetarium. Also, your school or library can give you an idea what's best for you.

Here's a good, specific book: New Handbook of the Heavens, by Bernhard, Bennett, and Rice (McGraw-Hill; \$4.65). Published in 1948, Hayden Planetarium calls it "the most satisfactory guide to the study of the stars by the amateur."

You'll get a lot of help—and much enjoyment—from a group, such as the Amateur Astronomer's Assn. There are plenty of opportunities to join local astronomy societies for amateurs—they exist in almost all parts of the country.

You don't have to spend a small fortune for a telescope that will do a good job for you. Astronomers say that one for around \$50 can keep a beginner busy and interested for many years—(provided you supply yourself

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

DEC. 25, 1954

with information as to what you're looking at). Refinements—and more expensive telescopes—can come later.

The universe offers not only special studies (celestial navigation, celestial mechanics for space travel and rocket propulsion, and the like); astronomy itself has many facets.

For example: You may wish to limit your observations and studies to, say, the sun, the moon or a particular planet. Or perhaps you'll be drawn to observe the far-off galaxies beyond our own Milky Way.

Amateur specializing can be of great aid to professional astronomers and associations. Thus most observatories depend on amateurs to keep their records updated as to new comets appearing in the skies—because the professionals are too busy on special projects.

Perhaps you will choose no specialty. The wonder of the heavens may be enough in itself.

A sharp increase in home accidents has accompanied the do-it-yourself boom. American Mutual Liability Co. says a recent survey shows that accidents from home repair work and fixing are running at 638,000 a year.

Most do-it-yourselfers—about 180,000—get hurt as a result of making their own furniture. Some 252,000 of the injuries result from the use of tools such as saws, knives, and power machinery.

Main cause seems to be either inadequate equipment for specific jobs, or not enough knowhow on the part of the operator. Either one can spell real trouble—especially when power tools are involved.

Here are some tips to help minimize dangers:

- Beware of jobs that, once started, must progress on a strict timetable.
- Don't let your enthusiasm exceed your ability. Weigh all key factors before you start a job—your own time, aptitude, experience, equipment.
- Think out the entire project before you start. Make sure you can handle easily all steps involved. If you can't, get someone else to do it.
- Never skip clean-up time after working in your shop. Abused equipment is more likely to abuse you than well-kept equipment.

One drawback with most effective cough medicines is that they contain habit-forming drugs—narcotics such as morphine or codeine.

There soon may be a medicine on the market that gives the same results but that cannot cause addiction. Called Romilar, it is a synthetic cough-suppressant drug that is not a narcotic. It was developed by Hoffman-La Roche, Inc., has been under clinical test for about a year.

The new drug, used on hundreds of patients, has not affected heartbeat, breathing, mental alertness, or shown other side-effects.

The credit card continues to grow as a symbol of our time. Trip-Charge, Inc., announces that it aims to be a universal, all-purpose credit system.

Already it claims that card holders (at \$5 a year) can charge more than 125 different services. These include restaurants, hotels, motels, specialty shops, food stores, all kinds of automotive service, travel facility—and even television repair and dancing lessons.

As a companion to its line of Type M Unibrake Motors with magnetic braking . . . Master now offers a line of Type D Unibrake Motors with dynamic braking.

HOW IT WORKS. Dynamic braking is obtained with a patented* unique, multi-polar brake winding superimposed on the stator winding of any Master single-phase or polyphase induction motor.

ADVANTAGES. Unibrake motors with dynamic braking are very compact, usually no larger than the standard motor. And since the dynamic brake has no moving parts, there is no wear . . . nothing to adjust . . . braking torque remains uniform.

INCREASE PRODUCTION. Don't waste valuable production time waiting for machinery to coast to a stop . . . get quick slow-down for machine tool spindles . . . quick turn-around time on many operations . . . speed up automatic cycling of machinery. And since Type D Unibrake Motors come to a rolling stop, they are particularly adaptable to equipment requiring gear shift between cycles.

SIZES. Now available up to 30 horsepower . . . larger ratings are being developed. Master Gearmotors and variable speed drives can also be supplied with Type D Unibrakes.

LITERATURE. For complete information write for Data 3810.

THE MASTER ELECTRIC COMPANY • DAYTON 1, OHIO

Now

DYNAMIC BRAKING

for
A-C
motors



for any building job!

... use

FIR PLYWOOD

Large, light, strong, real wood panels save time and labor on maintenance or new construction. A type and grade for every need. For 1954 catalog, write (USA only) Douglas Fir Plywood Association, Tacoma 2, Wash. Or see your lumber dealer today!

Buy Only DFPA-Graded Panels

**TREASURERS
COMPTROLLERS
SALES MANAGERS**

Travel expenses can be reimbursed efficiently and without cash advances! TRAVELETTERS have been used for 60 years by thousands of outstanding companies, because TRAVELETTERS

- ✓ eliminate expense checks
- ✓ improve expense control
- ✓ lessen internal costs
- ✓ reduce travel expenses
- ✓ increase productive time
- ✓ minimize cash advances

For information write:

TRAVELETT

Travelletter Corp., Greenwich, Conn.



4,000,000 PER DAY

MOST MODERN LABEL PLANT IN AMERICA. Complete air conditioning and high speed, automatic equipment give us the edge—BETTER quality, FASTER delivery and ATTRACTIVE price on practically any flat paper label. Send your specifications for our proposal. KALAMAZOO LABEL CO., 301 W. Hanson, Kalamazoo, Mich.

See Clues on page 78

PRODUCTION

Noises that worry industry

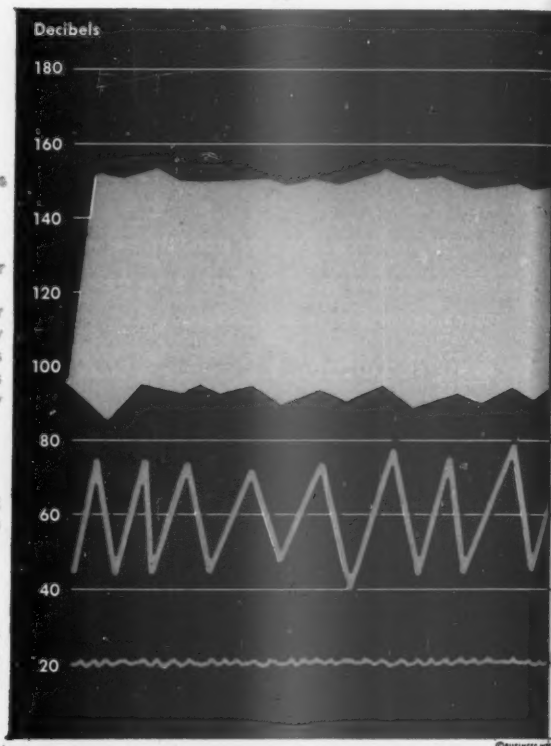
These things...

...make this much noise

Jet engines
Pneumatic chipper
Drop hammer
Boiler factory
Hydraulic press
Punch press
Subway

Most people speak within this range

You can't hear sounds much lower than this



Are They Piling Up Claims?

The only nice thing you can say about a loud noise is that its intensity decreases as its distance from the ear increases. To many men who earn their living working with noisy machines, however, this is largely an academic consideration.

The chart above shows the intensities of various loud industrial noises as they sound to men right next to the sources. These noises are more than bothersome; listened to day after day over a period of years, they are definitely harmful. A punch press operator, for instance, after perhaps 20 years on the job, is almost bound to find his hearing ability slipping faster than it should.

He may then claim—and quite possibly collect—compensation from the company in whose plant he has been working. Put this likelihood alongside (1) humanitarian considerations and (2) questions of efficiency loss, and you

can see why industry is seriously worried about noise.

• **Fears**—A company in the Midwest faces the possibility of paying out \$500,000 in compensation claims—all based on workers' loss of hearing. That's only one company in hundreds. One observer estimates that loss-of-hearing claims against industry right now could reach \$2-billion. That includes the claims of workers who are now asking compensation or are vaguely thinking of doing so. Another guess is that, if these \$2-billion of claims were decided in favor of the workers, another \$14-billion worth would crop up from workers who had not previously given thought to claiming compensation.

In New York State, a mere reading of the law is enough to frighten any executive with a noisy plant. The law says that any employee whose hearing has fallen below average as a result of

Ford's new V-8s offer substantial power increase,
"Trigger-Torque" performance, fashion interiors



Inside Story of the beautiful '55 Ford

Ford for '55 is a mechanized marvel. But today
it takes more than a fine engine to power a sale. It
takes styling—outside and inside.

That is why Ford's new inside story is one
of captivating color and texture
—tribute to upholstery
material exactly
chosen and

tested.

Vinyl-coated
seat tops and trim
demanded one type of
fabric, headlinings quite
another. Arm rests and door
panels offered individual backing
problems. We are proud that

Wellington Sears fabric diversity—ranging
from heavy-duty sateens and drills to the supple
"Lantuck"® non-woven fabric—helped put Ford on the road.

Today, Wellington Sears supplies fabrics for all the major
automotive firms. Indeed from ocean-going duck to
aircraft laminates, Wellington Sears has been blue-printing
fabrics for industrial progress for over a century.
Unparalleled experience—and equipment—is at your service.

Wellington Sears

A Subsidiary of West Point Manufacturing Company


FIRST In Fabrics For Industry

For The Rubber, Plastics, Chemical,
Metallurgical, Automotive, Marine And Many Other Industries

Wellington Sears Co., 65 Worth St., New York, 13, N. Y. • Atlanta • Boston • Chicago • Dallas • Detroit • Los Angeles • Philadelphia • San Francisco • St. Louis



ROCKWELL-NORDSTROM

lubricated plug

valves  save money \$ anywhere you

use them. . . Originally designed for the high

pressures and corrosive-abrasive services in the

oil fields , they soon set new standards 


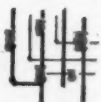

of performance in the petroleum and gas industries

. . . Then it didn't take long for manufacturing and


processing men to learn  that even on themost routine  service **ROCKWELL-NORDSTROM**

valves save money because they out-last and


out-perform any other valve. . . Leak-proof

sealing and quarter turn  operation makethem ideal for fuel supply or products lines . . . on fire prevention systems  Rockwell-Nordstrom dependability  is a low cost

investment in plant safety. . . Learn how Rockwell-

Nordstrom valves can pay you dividends 

by cutting maintenance and eliminating down-

time repairs. . . write for a catalog  today. . . **ROCKWELL** Manufacturing Company,

Pittsburgh 8, Pa.

Canadian Valve Licensee:
Peacock Brothers Limited

plant noise can claim a compensable loss. Only one thing has saved New York companies from a flood of claims: An administrative ruling requires the worker to be away from the injurious noise for six months before he can receive compensation.

The Associated Industries of New York State, Inc., a group representing manufacturing firms in the state, wants the law changed so that compensation will be paid on the basis of actual wages lost as a result of ear injury. The legislature rejected that idea this year.

• **Snags**—When you try to untangle the noise problem, you run into two distinct snags:

• How should the law be interpreted? Interpretations differ drastically from one state to another. One will base compensation on loss of wages. Another will require that the worker prove total deafness before he gets a cent in compensation. A third will say that the worker can show himself entitled to payment merely by proving that his hearing has been impaired, even though he hasn't lost a day of work because of it.

• What is hearing loss? New York says that it is a loss that pulls the worker's hearing ability down below a predetermined "average" level. Massachusetts recognizes no such partial loss, only total deafness. Wisconsin is working out a middle-ground approach. Next year, the Wisconsin legislature will consider the recommendations of two groups—the Wisconsin Industrial Commission and the State Medical Society of Wisconsin. The gist of those recommendations is that every worker is bound to lose some of his hearing ability as he gets older; hence, he should receive compensation only for excessive loss.

• **Measurement**—Wisconsin's idea represents the approach that other states are likely to take in the future. Roughly, the idea works like this:

First, you set up a formula of "average" hearing ability in various age groups. This formula involves both decibels—units of sound intensity—and frequencies, which the human ear sorts out as high and low notes. Then you take the worker who is claiming compensation and find out how far below his age group's average he is. Down to a certain point below average, he is entitled to no compensation; for his hearing is still considered to be within a normal range. Below that point, he receives compensation. The degree of his disability is figured according to where his hearing ability falls on the formula scale.

• **The Decibel**—Companies are doing a good deal of work to avoid getting entangled in the loss-of-hearing compensation laws. Much of this work is aimed at cutting down the noise of

"Financial Security Is Based On Savings..."

ARTHUR B. HOMER

*President
Bethlehem Steel Corporation*



"... and the purchase of U.S. Savings Bonds through the Payroll Savings Plan is one of the easiest ways for any individual to save for economic security."

If you agree with Mr. Homer that "... the Payroll Savings Plan is one of the easiest ways to save for economic security."—

If you believe with millions of other Americans that there is no safer investment than U.S. Savings Bonds—

Why not take a *really personal* interest in your employees and your Payroll Savings Plan?

Pick up the phone, now, and ask the man in charge of your Payroll Savings Plan three questions:

- How many of your employees are enrolled in the Payroll Savings Plan?
- What is the percentage of employee participation?

- When did your company last conduct a person-to-person canvass?

If less than 50% of your employees are enrolled in the Plan ... if you have not conducted a person-to-person canvass in the past two years (*or if you do not have the Plan*), act now! Telephone, wire or write to Savings Bonds Division, U.S. Treasury Department, Washington, D. C. You will hear promptly from your State Director, U.S. Treasury Department who will be glad to help you conduct a person-to-person canvass that will put an application blank in the hands of every employee. That is all you have to do. Your employees will do the rest. They want to save for their economic security.

The United States Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, the Advertising Council and The McGraw-Hill Publishing Company, Inc.



clues:

Published weekly—closes 12 days in advance. Rate—\$5.85 per line, minimum 2 lines. Position wanted ads only charged at 1/2 of above rates. Allow 5 average words as line; count 2 words for box number. Address box number replies c/o Business Week to office nearest you. NEW YORK, 330 W. 42nd St., CHICAGO, 520 N. Michigan Ave., SAN FRANCISCO, 68 Post St.

EMPLOYMENT

Position Vacant

Sales Trainee a Connecticut firm wants a recent male college graduate between 23-28 years of age, who has completed his military duty, to train for a sales engineering position in the field. Prefer one with technical background and sales ability. If interested, please contact Milton Yeoman, Personnel Director, Rogers Corporation, Rogers, Connecticut.

Selling Opportunity Offered

Mfgs Agents Wanted Machine screw and sheet metal screw manufacturer wants to expand sales. Desires agents now serving industrial accounts. List territory and accounts now handles. RW-4900, Business Week.

Positions Wanted

Public Relations. Creative man with many firsts. Newspaper reporter background. PW-4905, Business Week.

Information is my business—Man with chemistry and library degrees seeks new responsible position. PW-4939, Business Week.

Selling Opportunity Wanted

Minneapolis-St. Paul Mfg. agent calling on industrial accounts, consulting engineers, and contractors desires additional lines to supplement air conditioning and heating lines. RA-4820, Business Week.

SPECIAL SERVICES

Contemplating foreign trade expansion? Our representatives all over the world are ready to assist you in developing on the spot information. Our clients include manufacturers, exporters, engineering concerns, advertising agencies, industrial consultants, and foreign governments. For details, write Overseas Business Services, McGraw-Hill International Corporation, 330 W. 42nd St., N. Y. 36, N. Y.

Collections—Repossessions—Investigations anywhere. Bonded. Maryland Bureau, 615 Deepdene Road, Baltimore, Maryland.

Registered Patent Attorney

Patent Information Book, without obligation. G. Miller 124BW4, Warner Bldg., Wash. 4, D. C.

BUSINESS OPPORTUNITIES

Former displaced person who created and operates a nationally advertised world-wide shopping service seeks financial assistance. BO-4949, Business Week.

EQUIPMENT

Wanted

Wanted Aircraft Material Surplus or Termination inventories hardware—electrical, or components also raw stock, rod and bar stainless, aluminum, steel, brass, send lists for cash offer to Collins Engineering Company, 9950 Washington Blvd., Culver City, Calif.

When Answering

BOX NUMBERS . . .

to expedite the handling of your correspondence and avoid confusion, please do not address a single reply to more than one individual box number. Be sure to address separate replies for each advertisement.

machines—and this is not so easy a job as it sounds. It is hard to cut a machine's noise by even one decibel. When you work with noise as high as 130 decibels—which is about as much as the human ear can take without physical discomfort—a one-decibel drop doesn't help the ear much, even though it is a very large drop on paper.

Probably the most important step that industry has taken in the past year has been simply to find out what the problem is all about. Acoustical engineers have been making the rounds of forums, conferences, symposiums, telling companies with noise problems what they can do to solve them.

One of these experts complains that the invitations are getting out of hand. He says, "It seems that a couple of our men are out on one speaking junket or another all the time. We're falling behind in our work because of it." He says, too, that you hear the same questions asked wherever you go:

- "I have an old drop forge that's causing trouble. Is there anything I can do to make it quieter?"

- "Should I require my men to wear ear plugs?"

- "Is acoustical tile worth the investment?"

- **New Approach—**Almost in self-defense, the acoustical engineers are trying a new approach to the mounting requests to speak. Through their professional society, the Acoustical Society of America, they are publishing a bi-monthly magazine named Noise Control for "the reader who needs to know about noise control, whether he is an engineer, the manager of a factory, an audiologist, or an architect." The first issue goes out to some 5,000 subscribers this week.

What are the answers? Ideally, a machine should have quiet built right into it. This means using V-belts where possible, instead of gears; it means using high pressures rather than impact to form metal; it means mounting vibrating parts on rubber or another absorbent.

For equipment that is already noisy, some companies are building rooms around it, equipping workers with ear plugs or muffs. Acoustical tile doesn't cut down a machine's noise, but it does prevent some of the noise in one shop from carrying over to another.

- **Consultants—**Some companies are doing more than listening to the acoustical engineers talk at conferences. Many are taking them on as consultants. Probably the two most active consulting organizations in the field are the Acoustics Research Group, Armour Research Foundation of the Illinois Institute of Technology, Chicago; and Bolt Beranek & Newman, Inc., Cambridge, Mass.

You get a measure of the intensity

of interest in noise by looking at what has happened to Bolt Beranek & Newman in the past four years. In 1950, it was a three-man firm. Its members split their time between the Massachusetts Institute of Technology and their consulting practice. Today, there are 65 people on the staff, including 45 acoustical scientists.

PRODUCTION BRIEFS

RCA has licensed from CBS the rights to direct view color TV techniques developed by CBS-Hytron. The important feature in the patent lease is CBS curved screen mask, a device that controls color distribution on TV viewing screens. Meanwhile, Emerson Radio & Phonograph Corp., which recently suspended color TV operations, said it will resume when a suitable popular price tube has been found.

- **Fairchild Engine & Airplane Corp.** has made a deal with Kendall Controls Corp. of Waltham, Mass., to assume Kendall's military contracts. Kendall, maker of aeronautical valves and control devices, will turn over some basic patents and manufacturing rights on many of its products.

- **Spencer Chemical Co.**, second largest synthetic ammonia producer, will invade the polyethylene field. As a licensee of Imperial Chemical Industries, Ltd., Spencer will turn out polyethylene products at a Texas plant.

- **Competitive development contracts** for the Air Research & Development Command have been let to Fairchild and General Electric. The two companies will develop a small turbo-jet engine for use in pilotless aircraft.

- **Niles-Bement-Pond Co.**, gauge and machine tool manufacturer, has purchased U.S. rights to make and market products of Sigma Instrument Co., Ltd. Sigma specializes in gauging and inspection equipment.

- **Newly developed manganese-chromium stainless steels** got a boost recently when Union Carbide & Carbon Corp. started producing pure manganese in plate form at a new Marietta (Ohio) plant. In full operation, the plant will turn out 6,000 tons a year.

- **Rubberized nylon materials**, developed by Goodyear and U.S. Rubber, may aid in cutting down aircraft fatalities due to exploding gas tanks. Used in fuel tanks, the lightweight elastic material—now given the blessing of CAA—would prevent the spraying of gas from ruptured tanks.

NEW PRODUCTS



In Case of Fire

The new fire extinguisher shown in action above will be on the market early next year. Ansul Chemical Co., the maker, believes that its Loewy-styled model, which was designed primarily for plants and trucks, will also do well as home equipment.

Meant to fill a gap between the company's 4-lb. and 20-lb. capacity extinguishers, this model carries 10 lb. of dry chemical, weighs 22 lb. in all.

Ansul says careful designing has made this one of the handiest extinguishers on the market, both to get started and to control. The unit has been approved by the National Board of Fire Underwriters. It will cost \$52.50.

•Source: Ansul Chemical Co., Marinette, Wis.

Tougher tops for convertibles are promised by Textileather Div. of General Tire & Rubber Co., 1708 Englewood Ave., Akron 9. Already being used by one leading auto maker on 1955 convertibles, Duratop is made of a vinyl plastic coating on a textile base. According to Textileather, the material won't shrink, stretch, stain, leak, rot, scuff, or crack.

For tiny nails and brads, Do-Hicky, Inc., P.O. Box 37, Dept. 121, Rockville Centre, N. Y., has designed the Rammer-Hammer. It has a magnetic tip that holds the elusive nail in place and a lever action that drives it home. To finish off tough jobs, the other end of the steel and brass tool doubles as a small hammer. Price \$2.00, postpaid.

Another tubeless tire: This time it's a high-speed job made by U.S. Rubber Co. Nylon cord treated with a new kind of liquid rubber is said to make this tire extra tough, able to stretch without losing strength. The tire is said to give a quieter ride and have superior braking qualities; to top it off, U.S. Rubber has recessed the sidewalls so they won't scuff.

ADVERTISERS IN THIS ISSUE

Business Week—December 25, 1954

THE ADVERTISING COUNCIL.....	77	KALAMAZOO LABEL CO.....	74
AIR MAZE CORP.....	3	Agency—William J. Williams	
Agency—Batten, Barton, Durstine & Osborn, Inc.		KELLER TOOL CO.....	1
ALLEN-BRADLEY CO.....	25	Agency—The Fensholt Adv. Agency, Inc.	
Agency—The Fensholt Adv. Agency, Inc.		LEES-BRADNER CO.....	6
ALUMINUM CO. OF AMERICA.....	3rd Cover	Agency—Belden & Hickox	
Agency—Fuller & Smith & Ross, Inc.		LIBERTY MUTUAL INSURANCE CO.....	28
AMERICAN OPTICAL CO.....	8	Agency—Batten, Barton, Durstine & Osborn, Inc.	
Agency—Sutherland-Abbott		LLOYD-THOMAS CO.....	36
THE AMERICAN WELDING & MFG. CO....	35	Agency—Klau-Van Pietersom-Dunlap, Inc.	
Agency—The Bayless-Kerr Co.		MANZEL.....	43
BANK OF AMERICA.....	12	Agency—Baldwin, Bowers & Strachan, Inc.	
Agency—Chas. B. Stuart		MASTER ELECTRIC CO.....	73
THE BASSICK CO.....	68	Agency—The Parker Adv. Co.	
Agency—James Thomas Chirurg Co., Inc.		MOORE BUSINESS FORMS, INC.....	70
BENDIX AVIATION CORP.....	32-33	Agency—N. W. Ayer & Son, Inc.	
Agency—MacManus, John & Adams, Inc.		MORGAN STANLEY & CO.....	67
BUELL ENGINEERING CO.....	38	Agency—Albert Frank-Gunther Law Inc.	
Agency—Hicks & Greist, Inc.		NATIONAL STEEL CORP.....	40-41
BURROUGHS CORP.....	4th Cover	Agency—Campbell-Ewald Co.	
Agency—Campbell-Ewald Co.		NETHERLANDS INDUSTRIAL INSTITUTE	56-57
BUSINESS WEEK.....	69	Agency—Oliver-Beckman, Inc.	
CHRYSLER CORP.....	31	THE OSBORN MFG. CO.....	26
Agency—Zimmer, Keller & Calvert, Inc.		Agency—The Griswold-Eshleman Co.	
CLARAGE FAN CO.....	67	OTIS ELEVATOR CO.....	7
Agency—William J. Williams		Agency—G. M. Basford Co.	
CLUES (CLASSIFIED ADVERTISING).....	78	PITNEY-BOWES, INC.....	11
THE COOPER-BESSEMER CORP.....	5	Agency—L. E. McGivern & Co., Inc.	
Agency—The Griswold-Eshleman Co.		REMINGTON RAND, INC.....	2
DENISON ENGINEERING CO.....	45	Agency—Leeford Adv. Agency, Inc.	
Agency—The Griswold-Eshleman Co.		REVOLVATOR CO.....	36
DEWEY & ALMY CHEMICAL CO.,		Agency—La Porte & Austin, Inc.	
DIV. OF W. R. GRACE & CO.....	61	ROCKWELL MFG. CO.,	
Agency—Horton-Noyes Co.		NORDSTROM VALVE DIV.....	76
DOUGLAS FIB PLYWOOD ASSOC.....	74	Agency—Marsteller, Gebhardt & Reed, Inc.	
Agency—The Condon Co.		SHELL CHEMICAL CO.....	2nd Cover
E. I. du PONT de NEMOURS & CO.....	55	Agency—J. Walter Thompson Co.	
Agency—Batten, Barton, Durstine & Osborn, Inc.		SPECTOR MOTOR SERVICE, INC.....	48
EBASCO SERVICES, INC.....	37	Agency—Garfield-Linn & Co.	
Agency—Albert Frank-Guenther Law, Inc.		TOWMOTOR CORP.....	49
ELECTRIC STORAGE BATTERY CO.....	27	Agency—Howard Swink Advertising Agency, Inc.	
Agency—Geare-Marston, Inc.		TRAVELETTER CORP.....	74
ELJER CO.....	58	Agency—Moore & Co., Inc.	
Agency—Ross Boy, Inc.		UNION CARBIDE & CARBON CORP.....	39
FEDERAL PACIFIC ELECTRIC CO.....	60	Agency—J. M. Mathes, Inc.	
Agency—Beatty & Oliver, Inc.		VANADIUM CORP. OF AMERICA.....	53
FINNELL SYSTEM, INC.....	63	Agency—Hazard Adv. Co.	
Agency—Johnson, Read & Co., Inc.		VANANT CO.....	48
FLETCHER AVIATION CORP.....	42	Agency—Van Handel Adv. Agency	
Agency—Hixson & Jorgensen, Inc.		VAPOR BLAST MFG. CO.....	58
FRICK CO.....	48	Agency—Morrison-Green-Seymour, Inc.	
Agency—Waynesboro Adv. Agency		VIKING PUMP CO.....	62
GENERAL MOTORS CORP.		Agency—J. M. Hickerson, Inc.	
(ELECTRO-MOTIVE DIV.).....	46-47	WELLINGTON SEARS CO.....	75
Agency—Kudner Agency, Inc.		Agency—Ellington & Co., Inc.	
INTERNATIONAL HARVESTER CO.....	59	WELLMAN ENGINEERING CO.....	62
Agency—Young & Rubicam, Inc.		Agency—The Griswold-Eshleman Co.	
INTERNATIONAL NICKEL CO.....	15	WHITING CORP.....	50
Agency—Marshalk & Pratt Co., Inc.		Agency—Waldie & Briggs, Inc.	
JOHNS-MANVILLE CORP.....	4	WOMAN'S HOME COMPANION.....	16
Agency—J. Walter Thompson Co.		Agency—McCann-Erickson, Inc.	

1954: Turning Point in History?

As 1954 passes into history, most of us are eager to learn what next year has in store. There's a feeling of optimism in the air, mainly because of what we have experienced in the recent past. And as we wonder about the future, it is worthwhile to look back at the last twelve months, because this year may be considered by future generations as a turning point in our history.

It may well be that 1954 will be remembered as the year when the cold war became the cold peace. True, it has been an uneasy peace, but the forging of Western unity has given the free world hope that the Communists will never dare to attack and that an atomic holocaust can be avoided.

Certainly, 1954 will go down as the year when we conquered the depression phobia. The year began with the most "widely advertised recession" in our history already under way, and the economy was to undergo a succession of jolts.

There were severe tests, but we weathered them without suffering the type of economic disaster we have known in the past. There was no mass unemployment. There was no chain reaction from recession into deep depression as economists like Colin Clark had gloomily predicted. Indeed, historical perspective will probably show that the decline was little more than a pause before beginning a new upward climb.

The enormous structural changes that have taken place in the last two decades were primarily responsible for keeping the economy on an even keel even as it was buffeted by adverse currents. But when economic historians study 1954, we think they will find as great a change in attitude as in structure.

There was a universal feeling that we need not experience a Great Depression and a universal conviction that all the devices at the disposal of government and private enterprise would be mobilized to prevent it.

This feeling was an important factor in providing a basic confidence in our ability to withstand the economic storm. And the Administration, the business community, and consumers can all take pride in their performance. The fact that we are united in our determination to avoid an economic decline of severe magnitude is the real reason why the future looks bright.

Fighting with Economics

Many difficult and challenging tasks face the newly created Council on Foreign Economic Policy. In establishing this body to coordinate and simplify our present aid and trade programs, Pres. Eisenhower indicated the gravity and importance of its work by recalling former Budget Director Joseph G. Dodge from private life to be its chairman and by providing the council itself with Cabinet status. It will be the Administration's chief instrument in the economic fight against Communism.

At present, our foreign economic policy suffers from

the housewives' complaint that too many cooks spoil the broth. The cooks, in this case, include the Departments of State, Treasury, Agriculture and Commerce, and agencies like the Foreign Operations Administration, which is due to expire in June. These groups have accomplished a great deal, but the presence of so many agencies has naturally led to overlapping, extravagance, needless complexity, and confusion.

The job of the new Council entails much more than liquidating or integrating this jerry-built and hydra-headed structure. It will be concerned with coordinating foreign policy with the problems of security and domestic policy. And it will also be engaged in policy-making, especially in finding realistic and effective projects to help the free nations of Asia resist Communism.

Thus, Pres. Eisenhower has taken a constructive and forward step by establishing this body to get all our programs in harness. If it is able to coordinate and formulate policies, it will not only end the confusion in government, but among the public, here and abroad, as well. We are confident that the Council will be able to meet this challenge.

Without Strings

Standard Oil of New Jersey has made a significant contribution to education by presenting grants totaling \$500,000 to aid privately endowed institutions of higher learning. The amount itself is, of course, substantial, but the really important aspect of this contribution is that Standard Oil has specifically declared that the money is to be used as an unrestricted gift.

This is a departure from usual corporate practice, which confines educational gifts to projects showing "direct" benefits that are easily justifiable to stockholders. Standard Oil admits it will not gain directly by giving \$50,000 to the National Fund for Medical Education, and \$450,000 to 138 colleges and universities for undergraduate education. However, the company declares that it is carrying out a public responsibility with the grants.

Standard Oil points out that the heavy taxes it pays help tax-supported schools. And it should be noted that the company has long made grants to educational institutions for purposes in its own interests.

In choosing this new approach in corporate giving, Standard Oil is confident that it is helping to foster a broader accumulation of knowledge and a better understanding of freedom.

We believe that business can serve its own interests by following the lead of Standard Oil and providing unrestricted grants to our private institutions in addition to the regular flow of funds going into research projects and scholarships in specific fields. By doing so, it will not only add to the sum of our knowledge, but maintain our freedom to acquire knowledge.



Industry—Please Note:

ALUMINUM ROOF COATINGS TURN BACK THE WHITE-HOT RURAL SUN

Any farmer can tell you that your office, factory or store can benefit from his experience with aluminum roof coatings. He knows, for example, that they extend roof life and reduce roof maintenance like no other coatings can. With bad weather coming on, he's painting right now to assure himself a weather-tight winter.

Secret of this weatherproof protection is the addition of billions of pure aluminum flakes to a tough asphalt base. These tiny particles rise to the surface to form a metal armor as the coating sets. This aluminum shield protects the vital oils from the sun, keeps the coating pliable and waterproof, prolongs roof life. As a reflective agent, aluminum flakes turn back 70 per cent of the sun's heat, reduce inside temperatures as much as 15°.

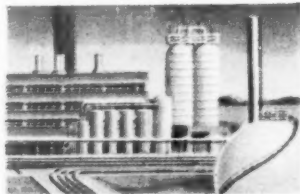
ALCOA DOES NOT MAKE ROOF COATINGS, but Alcoa® Aluminum Pigments are found in all the best brands. The unexcelled qualities of heat, moisture and corrosion resistance that make these coatings ideal for the farm are equally good for industrial roof maintenance. Full information with detailed application instructions is found in the booklet, *Aluminum Asphalt Coatings Make Time Stand Still*. Send for it.

ALCOA 
ALUMINUM

ALUMINUM COMPANY OF AMERICA



Aluminum roof coatings can mean cooler working conditions in your business . . . lower air-conditioning costs . . . more efficient hot-weather operations.



Industry has found that aluminum is the best weathering paint for maintenance of all structural steel equipment and it gives much better appearance, too.

Paint Service Bureau,
2193-M Alcoa Building, Pittsburgh 19, Pa.

Please send me your free booklet, *Aluminum Asphalt Coatings Make Time Stand Still*.

I plan to paint _____

Name _____

Company _____

Street _____

City _____ Zone _____ State _____

Something new under the sun . . .

THE MOST MODERN ACCOUNTING MACHINE

Truly advanced . . . truly unique . . . as modern as tomorrow. That's the Burroughs Sensimatic accounting machine. At each quick flick of the selector knob, the Sensimatic is ready for a different accounting job, and it does each one as automatically and accurately as a specialized machine. It's today's finest, most versatile accounting machine. The exclusive Burroughs sensing panel is tailored to any combination of accounting procedures you wish . . . guides the Sensimatic to letter-perfect posting. It's tomorrow's accounting machine, too. To alter a procedure, you just change the panel, not the machine. Ask for a demonstration of the Burroughs Sensimatic that best suits your application. Burroughs Corporation, Detroit 32, Michigan.

Burroughs Sensimatic



